

Saturday 24 September 2016

# Amateur Photographer

Passionate about photography since 1884

Hands-on with the  
**Canon EOS M5**  
Canon gets serious about mirrorless



**SPECIAL LENS ISSUE**

## Best lenses under £200

**Revealed:** bargain glass for Canon, Nikon and more

### Get more from your lenses

- **Fine tune** your **AF** for sharper shots
- **Manual-focus** masterclass
- **Favourite lenses** of the pros

Taken with a  
£180 lens!

Winning landscape images from **Amateur Photographer of the Year 2016**



# SONY



FE 85mm F1.4 GM

FE 70-200mm F2.8 GM OSS

FE 24-70mm F2.8 GM



## Tomorrow's lenses today, from Sony

**Lens standards are changing. Advances in camera performance and soaring creative ideals demand a new approach to lens technology.**

Sony now redefines the lens, with a clear vision of the future. The G Master revolution begins with three large-aperture lenses that achieve a supreme blend of high resolution and beautiful bokeh thanks to new XA (Xtreme Aspherical) lens elements with increased surface precision.

With these new additions, there are now 20 full-frame e-mount lenses available, giving you all the tools you need to capture the ultimate shot.

All lens availability is dependent on market release dates. Discover more at [www.sony.co.uk](http://www.sony.co.uk)

'Sony' and the Sony logotype are registered trademarks of Sony Corporation. All other logos and trademarks are the property of their respective owners.





COVER PICTURE © NEIL BUCHAN GRANT (WWW.BUCHANGRANT.COM)

# 7days

## A week in photography



One of the earliest lessons you learn in photography is 'spend it on the glass,' since using a good camera with a cheap lens is like buying a sports car and

never getting out of second gear. While it's true that the finest lenses have a price tag to match, you can find bargains if you shop around. Turn to pages 49-53 to discover the best lenses for a range of mounts under £200 – I defy you not to be tempted! We also help

you to get more from your existing lenses, with guides to fine-tuning autofocus and mastering manual focus.

With 2016 being a Photokina year – yes, we'll be there! – some exciting new cameras are in the pipeline. The latest is the Canon EOS M5. Canon has, up to now, had little presence in the growing mirrorless market, but that may now be set to change. Read Andy Westlake's early impressions on pages 8-9.

**Nigel Atherton, Editor**

## In this issue

### 8 First look

Andy Westlake gets hands on with the Canon EOS M5

### 13 Fine-tune your autofocus

Angela Nicholson explains how to adjust DSLR autofocus systems to ensure sharpness

### 20 Class glass

What are the lenses award-winning shooters from a variety of genres use and why?

### 28 APOY results

We reveal the top 30 from the APOY landscapes and cityscapes round and the winner of the Sigma prize

### 34 Digital Splash 16

Overview of the talks and workshops at Liverpool's Digital Splash 16

### 37 Making magic manually

Matt Golowczynski looks at how to use manual-focus technology effectively

### 49 Bag yourself a bargain

Michael Topham goes in search of the best lenses to buy with £200

### 55 Take manual control

Andy Westlake reviews the advantages of manual focus lenses and the various brands available

### 59 Sigma Mount Converter MC-11 Canon EF-E

John Huxley puts the Sigma MC-11 adapter to the test

## Regulars

### 3 7 days

### 18 Inbox

### 42 Evening Class

### 46 Accessories

### 63 Tech Talk

### 82 Final Analysis

JOIN US ONLINE

**Amateur Photographer**

amateurphotographer.co.uk



Facebook.com/Amateur.photographer.magazine



flickr.com/groups/amateurphotographer



@AP\_Magazine



amateurphotographer magazine

## ONLINE PICTURE OF THE WEEK



IMAGES MAY BE USED FOR PROMOTION PURPOSES ONLINE AND ON SOCIAL MEDIA

© GRANT GLENDINNING

## Ghost of the Fairy Pool

by Grant Glendinning

Canon EOS 5DS R, 16-35mm, 133secs at f/11, ISO 50, ND filter, polarising filter

This image was uploaded to our website gallery. 'When I arrived at the Fairy Pools in the Isle of Skye, it was quite cloudy so I took a few landscape-oriented shots to minimise a featureless sky,' says Grant. 'After a short while, the clouds broke with sunshine and blue sky appearing intermittently. I decided to shoot a very long exposure to capture some of the nice light and colour coming through, and shoot in portrait. The result was this image with some cloud movement and what looked to me like a face in the sky.'



**Win!** Each week we choose our favourite picture on Facebook, Flickr, Twitter, Instagram or the reader gallery using #appicoftheweek. PermaJet proudly supports the online picture of the week winner, who will receive a top-quality print of their image on the finest PermaJet paper. It is important to bring images to life outside the digital sphere, so we encourage everyone to get printing today! Visit [www.permajet.com](http://www.permajet.com) to learn more.

## Send us your pictures

If you'd like to see your work published in *Amateur Photographer*, here's how to send us your images:

**Email** Email a selection of low-res images (up to 5MB of attachments in total) to [appicturedesk@timeinc.com](mailto:appicturedesk@timeinc.com).

**CD/DVD** Send us a disc of high-resolution JPEG, TIFF or PSD images (at least 2480 pixels along its longest length), with a contact sheet, to the address on page 19.

**Via our online communities** Post your pictures into our Flickr group, Facebook page, Twitter feed, or the gallery on our website. See details above.

**Transparencies/prints** Well-packaged prints or slides (without glass mounts) should be sent by Special Delivery, with a return SAE, to the address on page 19.



## NEWS ROUND-UP

The week in brief, edited by Chris Cheesman

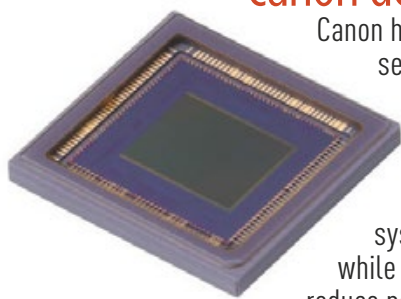
### Laowa moves 12mm f2/8 launch

Chinese lens maker Laowa has moved the launch of its new 12mm f/2.8 lens to November. Originally due out in August, the 12mm f/2.8 Zero D wideangle lens, for full-frame cameras, features 16 elements in 10 groups, with three extra-low-dispersion elements. It is due to cost £899.99.



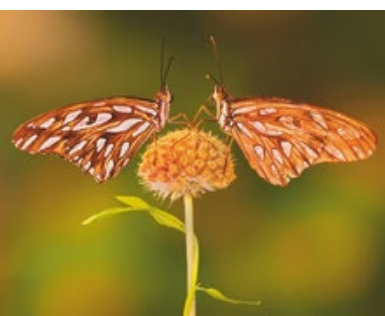
### Canon develops new sensor

Canon has developed a new CMOS imaging sensor that it says makes it possible to achieve a wider dynamic range and shoot better images of moving subjects. The sensor deploys a new signal-readout drive system to expand dynamic range, while a new pixel structure aims to reduce noise.



### 60mm lens for Leica T

Leica is set to release a 60mm prime lens for the Leica T compact system camera. The Leica APO-Macro-Elmarit-TL 60mm f/2.8 Asph bolsters the T-system lens portfolio to six models, comprising three zooms and three primes. The new lens is designed to deliver the 35mm viewing angle equivalent of a 90mm lens and will go on sale in mid-September, priced £1,800.



### Amazing insects winner

A photographer based in Argentina has won the Amazing Insects Photography Competition, beating more than 125 entries. Mario Gustavo Fiorucci won a year's membership to The Society of International Nature and Wildlife Photographers, the body that organised the competition.

© MARIO GUSTAVO FIORUCCI

© AUDUN RIKARSDEN



## WEEKEND PROJECT

### Spell it out

Every time we walk down the street we are surrounded by typography, from road signs and shop fronts to advertising and car number plates. Unless it's relevant to us we usually ignore this visual language. However, if we head out with the intention of photographing what we see we tend to walk more slowly, and take the time to notice the size, colour and shape of each letter and word, rather than becoming fixated on what it says or means. Certain typefaces, for example, give clues to the age and even the purpose of a building. Certain colours (such as red) tell us how important a piece of information is to us. You don't need to travel far to embark on a typography treasure hunt, just step out of the door and enjoy reading the urban landscape.

**1** Many people have drawn inspiration from the typography of the urban landscape. Walker Evans created some wonderful shots of streets, cafés, signs and billboards. Spend an afternoon studying his work.

**2** Look for amusing juxtapositions between words on the street and those walking past them – a dog in a pushchair being wheeled past a Walk4Life poster, or a guy sitting in front of some interesting graffiti.

### Simply Electronics halts sales

Simply Electronics, a Hong Kong-based company that sold camera gear to UK photographers, has halted sales. A message posted on the firm's website states: 'We regret to inform you that we are no longer processing orders. If you have any transactional enquiries or an existing order that has not been delivered, please contact your card issuer to file for a chargeback.' The firm was not available for comment.





# BIG picture

Wildlife Photographer of the Year 2016 reveals first images

◀ Along with the British Wildlife Photography Awards, the Wildlife Photographer of the Year competition is the most anticipated nature competition in the UK. Every year the competition showcases the world's best nature images. Drove of people flood to see the exhibition at London's Natural History Museum, and you'll get your chance when it opens this year on 21 October. This year's competition received 50,000 entries from 95 countries and we'll soon know which 100 are to receive recognition. In the meantime, we make do with a sneak-peak at one of the images. This split-level shot, taken in Norway by Audun Rikarsden, shows a killer whale and a flurry of gulls enjoying the spoils of a trawler. For more information, visit [www.nhm.ac.uk/visit/wpy.html](http://www.nhm.ac.uk/visit/wpy.html).

## Words & numbers

**You don't study photography, you just do it**

Elliott Erwitt

American documentary photographer, b1928

**\$1.5 billion**  
Video drone sales in 2015

SOURCE: FUTURESOURCE CONSULTING



**3** Shooting typography requires awareness of what's going on at the edges of the frame. Once you've lined up your shot, scan the edges of the viewfinder to make sure that you are not cutting off any words or letters in half.

**4** Create your own alphabet by isolating letters and forming a montage in post-production. Then try making a new alphabet out of objects that have the appearance of letters, such as pipes that form an 'L' shape.

© WWW.ISTOCKPHOTO.COM/DAVE THOMAS NZ

Even the removal of street typography can make for an engaging picture







Apple CEO Tim Cook announces the iPhone 7 on stage at the 7 September Apple Event

iPhone 7

# iPhone 7 Plus to feature dual-camera system

 EARLIER this month Apple officially announced its latest iPhone releases: the iPhone 7 and 7 Plus. Labelled a 'huge advancement for mobile phone photography' by Apple, both models will feature upgraded camera systems with a number of enhanced features. However, the much-rumoured dual-lens system will be restricted to the more expensive and larger Plus model.

Besides optical image stabilisation, which was only seen in the 6/6s Plus series, both the iPhone 7 and 7 plus



The shallow depth of field mode in action

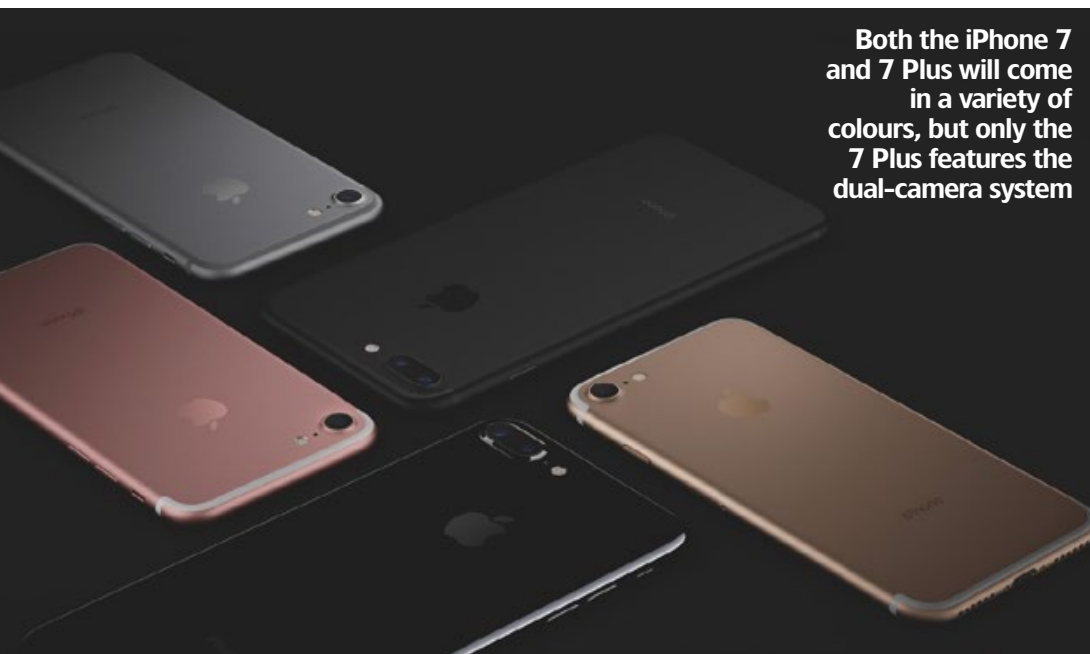
feature a wider f/1.8 aperture, 3x longer exposure, an improved 12MP image sensor, a flicker sensor to combat harsh artificial light, and a new and improved image signal processor (ISP) – responsible for

autofocus, white balance and face/body detection in real time. It is also capable of capturing impressively rich colour, which Apple has termed Wide Colour. The front-facing FaceTime camera has also been given a boost, up from 5MP to 7MP HD capture, again with Wide Colour and auto-stabilisation.

Exclusive to the 7 Plus is the dual-camera system: two 12MP sensors – one a 28mm equivalent wideangle lens (as would be standard on an iPhone) and the other, a 60mm telephoto lens. Used together, these amount to a 10x zoom – optically up to 2x, and then using software for up to 10x. Users can either toggle zoom or drag to create bespoke settings.

The dual cameras allow another feature that is fairly new to smartphone photography – a shallow depth of field mode. By accessing the portrait mode, the ISP uses the new telephoto lens and face/body recognition to keep the foreground in focus, while generating a bokeh effect in the background. This new function will be rolled out later in the year in a free update, although whether it will be able to match a more advanced camera with a large aperture lens remains to be seen.

The iPhone 7 and 7 Plus are due to be released on 16 September.




Both the iPhone 7 and 7 Plus will come in a variety of colours, but only the 7 Plus features the dual-camera system



© IAN CAMERON

## SLPOTY: Correction

 IN AP 10 September's Scottish Landscape Photographer of the Year (SLPOTY) article, we incorrectly attributed an image to the overall winner Ian Cameron. The main image across pages 22-23 should have been credited to Scott Robertson, and actually shows Buachaille Etive Mor in Glen Etive in the Scottish Highlands. As a result, we failed to show Ian Cameron's image 'Awakening Ben Loyal' (above), which was one of three images that took the SLPOTY overall prize. In addition, Ian Cameron's image 'Caramel Ice' was also not featured correctly. This is an error that was immediately brought to our attention by vigilant readers and is deeply regrettable. With the generous cooperation of the affected photographers, the correct images and information will feature as part of our *Photo Insight* series in upcoming issues of AP.



**Subscribe to  
Amateur  
Photographer**  
**SAVE  
35%\***

Visit [amateurphotographer.subs.co.uk/15W](http://amateurphotographer.subs.co.uk/15W) (or see p44)

\* when you pay by UK Direct Debit



One of the images  
by Master of Photography  
winner Gabriele Micalizzi



© GABRIELE MICALIZZI

# Master of Photography winner unveiled

**SKY Arts Master of Photography**, the first-ever televised talent contest for photography, concluded on 8 September. Gabriele Micalizzi was the show's winner, and was awarded €150,000. Over the previous eight weeks, 12 amateur and professional photographers from different photographic disciplines travelled across Europe and tackled a series of challenges that tested their ability, skill and instinct across various styles.

Season one's winner Gabriele Micalizzi is a former football player and professional tattoo artist from Milan, Italy, but he has been a professional

photojournalist for over ten years. Social matters and political issues are at the core of his work, and he is passionate about capturing the feelings of people out of the spotlight of mainstream media.

A call for entries to the second season of *Master*

*of Photography* opened online on 14 September and will close on 31 October 2016. Open to both amateurs and professionals across Europe, the chosen contestants will compete for a €150,000 prize. Terms and conditions will be posted on [www.masterofphotography.tv](http://www.masterofphotography.tv).

Phil Edgar-Jones, director of Sky Arts, said: 'As we hoped, the programme was a demonstration of just how powerful and important photography remains, and we brought some extraordinary undiscovered talent to light in the process. We look forward to seeing whom we might uncover in 2017.'

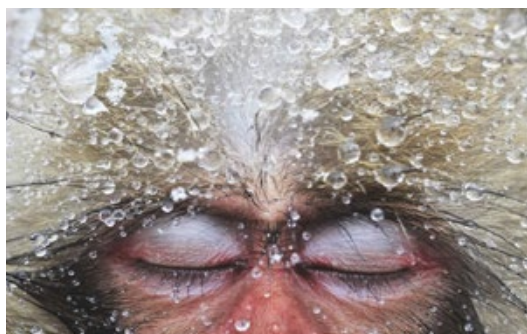


© GABRIELE MICALIZZI

Another image by Micalizzi

## TPOTY 2016 final call for entries

**THE CALL** for entries for the 2016 international Travel Photographer of the Year (TPOTY) awards will close on 1 October. The competition features three portfolio categories, three 'One Shot' single-image categories, a 'Smart Shot' category for images taken on a mobile phone or tablet, Young TPOTY, a 'New Talent' award and an HD video category. The competition receives entries from over 110 countries. To enter and for more information, visit [tpoty.com](http://tpoty.com).



© JASPER DOEST/TPOTY

Jasper Doest's image was joint winner of the Wild Stories category in the 2013 event

For the latest news visit [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk)

## Get up & go

The most interesting things to see, to do and to shoot this week. By Oliver Atwell

### LONDON

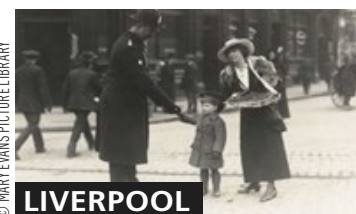


© DANIELE TAMAGNI

### African Style

October Gallery will display photographic works by pioneering Ghanaian photographer James Barnor and Italian photographer Daniele Tamagni. The show will feature Barnor's photographs of London's multicultural metropolis in the 'swinging' '60s' and Ghana in the 1950s, along with Tamagni's works of contemporary Africa.

Until 30 September, [www.octobergallery.co.uk](http://www.octobergallery.co.uk)



© MARY EVANS PICTURE LIBRARY

### LIVERPOOL

### First World War

Through photographs, oral histories and case studies, this exhibition, supported by Armed Forces Covenant, explores the many charity organisations established at the time of the First World War. The show will be held at Liverpool Museum.

Until early 2017, [bit.ly/2cqgzTt](http://bit.ly/2cqgzTt)



© NIGEL HICKS

### DEVON

### Nigel Hicks: Exmoor

Nigel Hicks is offering a one-day course exploring the virtues of photographing the autumn season. You'll gain experience in coastal, moorland and woodland photography in an area where Exmoor meets the sea. A booking costs £85.

8 October, [www.nigelhicks.com/8Oct2016course.html](http://www.nigelhicks.com/8Oct2016course.html)



© NATIONAL PORTRAIT GALLERY LONDON

### LONDON

### Black Chronicles

Black Chronicles showcases over 40 photographs presenting a unique snapshot of black lives and experiences in 19th and early 20th century Britain. The portraits of individuals of African and Asian heritage are an insight into Britain's imperial history.

Until 11 December, [www.npg.org.uk/whatson/blackchronicles](http://www.npg.org.uk/whatson/blackchronicles)

### British Wildlife Photography Awards

If you were unable to catch the London exhibition featuring this year's winners of the British Wildlife Photography Awards, then you're in luck. The show is now touring and currently at Astley Hall in Lancashire. George Stoye was this year's winner with his shot of a lion's-man jellyfish.

Until 5 November, [www.bwpawards.org](http://www.bwpawards.org)



© GEORGE STOYLE

### LANCASHIRE



# Canon EOS M5

With the launch of its latest model, the **EOS M5**, Canon finally seems to be getting serious about mirrorless cameras.

**Andy Westlake** takes a first look



## Built-in flash

There's a small pop-up flash unit in the viewfinder housing, as well as a hotshoe for attaching EX-series flashguns.

## Tilting touchscreen

The LCD tilts upwards by 85° and downwards by 180° to face forwards underneath the camera's body.

## Microphone input

A 3.5mm stereo microphone socket is included alongside USB, HDMI and an E3-type cable-release socket.

## Power

The M5 promises 295 shots per charge from its LP-E17 battery, or 420 in its power-saving ECO mode.



 ALTHOUGH Canon launched its first mirrorless camera, the EOS M, back in 2012, the company has never seemed to take the idea quite seriously, with only six EF-M lenses for the system appearing to date. However, with the EOS M5, Canon has finally made a camera to turn enthusiast photographers' heads.

In essence, the EOS M5 is a DSLR-like model with a centrally mounted electronic viewfinder and tilting rear touchscreen – a design blueprint that has proved popular ever

since the appearance of the original Olympus OM-D E-M5. Yet Canon has managed to cover the M5's petite body with a well-thought-out array of buttons and dials that promise to make it one of the nicest-to-use small CSCs we've yet seen. The addition of Dual Pixel CMOS AF means that it feels genuinely quick, too.

The EOS M5 is due to go on sale at the end of November, with a price of £1,049 body only, or £1,149 with the compact EF-M 15-45mm f/3.5-6.3 IS STM zoom. In mid-December a kit

with the new EF-M 18-150mm f/3.5-6.3 IS STM lens (see opposite) will be available, for £1,399. All will come with an adapter for Canon's EF and EF-S DSLR lenses in the box.

## Features

Canon says the 24.2-million-pixel sensor is closely related to that found in the EOS 80D. Together with the latest DIGIC 7 processor, it gives a

**Above:** Despite the camera's small size, Canon has provided a decent amount of space for your thumb to grip



## At a glance

- 24.2-million-pixel APS-C sensor
- Dual Pixel CMOS AF
- 2.36-million-dot EVF
- £1,049 body only, £1,149 with 15-45mm lens, £1,399 with 18-150mm lens



Canon's EOS M5 is small but handles well

sensitivity range of ISO 100–25,600. The EOS M5 can shoot at seven frames per second with AF between shots, or nine frames per second with focus fixed, with a 26-frame JPEG buffer.

For viewing, the 2.36-million dot OLED EVF has a magnification of around 0.62x, comparable to cameras like the Fujifilm X-T10 and Olympus OM-D E-M10 Mark II. It's joined by a 1.62-million-dot LCD that tilts upwards for use as a waist-level finder or downwards for overhead shots. It can even be set to face forwards beneath the camera for selfies.

The screen is touch-sensitive, and thanks to Canon's excellent interface it complements the physical controls very well. Not only can it be used to change almost any setting, but it's also available for selecting the autofocus point, even when using the electronic viewfinder. Canon allows you to choose the area of the screen you wish to use for this, either the whole screen, left or right halves, or any of the four quarters.

Video recording is available in full-HD resolution at up to 60fps, with a built-in 3.5mm stereo socket for adding an external microphone. There's 5-axis electronic image stabilisation on board, and while it's unlikely to be as effective as the in-body systems found in some rival cameras, it means footage will be

## Bluetooth connectivity

For the first time on a Canon camera, the M5 adds low-energy Bluetooth 4.1 connectivity alongside Wi-Fi and Dynamic NFC. The idea is that this can maintain a permanent connection to a smartphone, allowing it to be used as a remote shutter release without a huge impact on battery life. It can also be used to turn on the camera's Wi-Fi, either for copying images across for sharing or remote control with a live-view feed.



The touchscreen is quick and responsive

stabilised even when using non-IS lenses, and can be combined with optical stabilisation when using compatible EF-M or EF-S lenses. It's also possible to pull focus from one subject to another simply by tapping the touchscreen.

### Build and handling

The EOS M5's polycarbonate body feels sturdy in your hand, aided by a nicely sculpted rubber-coated grip. Indeed, it handles remarkably well for a small camera that's just 115.6x89.2x60.6mm in size and weighs 427g. The impression of quality is maintained by the attractive gun-metal finish and beautifully knurled metal dials. Canon says these have been designed to be easy to use but difficult to knock accidentally, and it appears to have achieved these aims.

Alongside an exposure-compensation dial and electronic dial around the shutter release, Canon has added an additional thumb dial on the top-plate. Pressing the Dial Func button in its centre cycles through various functions depending on the exposure mode, including ISO, white balance and drive mode. At first sight, this looks like it should be a really nice way of putting lots of control at your fingertips. Add in the comprehensive on-screen control panel and even touchscreen sceptics should rarely have to dip into the menus.

## First impressions

With the EOS M5, it seems Canon may just have made the mirrorless model that everyone has been asking for. It certainly has a lot of potential for persuading Canon's dyed-in-the-wool DSLR users to try out the technology for the first time, especially with the EF lens adapter included to ease the transition. The stumbling block, however, could be the price: at £1,049, the EOS M5 is pitched at around the same level as the Sony Alpha 6300, which includes 4K video recording, weatherproof build and a hugely capable autofocus. Nonetheless, we're excited to see Canon finally making a genuinely enthusiast-oriented mirrorless model.

# Canon reveals EF-M superzoom and EOS M5 accessories

ALONGSIDE the EOS M5, Canon has revealed the EF-M 18-150mm f/3.5–6.3 IS STM lens. With an 8.3x range equivalent to 29–240mm on full frame, the lens includes optical image stabilisation with a claimed 4-stop benefit for low-light handheld shooting and full compatibility with the EOS M5's 5-axis electronic IS. A stepper motor promises fast, silent autofocus, and there's a seven-bladed circular aperture designed to give smooth out-of-focus blur. Weighing just 300g, the lens is due in mid-December for £429.



The EOS M5 with 18-150mm lens, body jacket and matching leather strap

Canon has also revealed some more accessories for the EOS M5, although details are scarce. The EH29-CJ body jacket is a leather half-case in black or brown, and there's a matching EM-300DB premium neckstrap too.

## Sony introduces 18-110mm f/4 lens



Sony's E PZ 18-110mm f/4 G OSS is designed for video

SONY has announced a new video-optimised 18–110mm Super 35mm/APS-C lens for Sony A-mount cameras such as the Alpha 6300 and Alpha 7 series. With a 27–165mm equivalent range, the Sony E PZ 18-110mm f/4 G OSS is similar to the existing full-frame FE PZ 28-135mm f/4 G OSS, but redesigned for the smaller sensor format.

The lens will feature a 6.1x zoom ratio, constant f/4 aperture, Sony's Smooth Motion Optics design, in-lens stabilisation, and a dust and moisture-resistant build. With 18 elements in 15 groups, including six aspherical elements and three ED (Extra-low Dispersion) glass elements, the lens includes a seven-blade circular aperture design.

The 18-110mm is due to be released in December in Europe, retailing at approximately €4,000.





# Viewpoint Mike Smith

Considering we are always using electronic devices, such as cameras and smartphones, we need to ensure they remain charged

**C**harging: this is the perennial bugbear of both the travel photographer and any photographer not tethered in the studio. My current Nikon D700 has an EN-EL3e battery, which is rated at 1410mAh. According to Nikon, it should give 1,000 shots. Compare this to my Fujifilm X-M1, which has the NP-W126 rated at 1,260mAh, and which should give 300 images. Similar capacities, but as the AP 3 September issue on 'DSLR vs mirrorless' showed, they have different levels of power consumption. If I go out with my Nikon, I have no worries for the day and I'm often good for the week. The same can't be said for my Fuji camera, and I always make sure I pack a spare battery. It really is worth the premium for own-brand or quality-branded batteries; they are reliable and long lasting.

But when the juice finally runs dry and you get the red flashing light in the viewfinder (or on the rear LCD in the case of my X-M1), what do you do? Or throw into the mix that you have flown for a weekend of city shooting to mainland Europe, opted for cabin baggage and you have a European electrical system to negotiate.

For any travelling I do, I only take cabin baggage, which means I'm secure in the knowledge that my camera gear is safely stowed, and boarding and landing are rapid. Consequently, though, it means I

have to pack as light as possible. Charging has therefore become a key area for optimisation as I have a phone, tablet, power brick (well, 'stick'), card reader and Bluetooth speaker, all to manage. Ah, and the camera(s) as well.

## A single, simple solution

The key to keeping all this manageable and lightweight has been simplification. For me this has meant making sure all these devices can be charged using USB. Yes, the humble USB wall charger is the answer to all our charging problems. So how do you optimise this? My go-to product is the Mu folding plug charger ([www.themu.co.uk](http://www.themu.co.uk)).

The ingenious fold makes the plug flat, small and lightweight. There are the Classic (1A), Duo (2x1.2A), Worldwide Traveller (2.4A interchangeable) and Tablet (2.4A) versions. The Duo allows two devices to charge overnight, or you can go for the Tablet with one fast charging port. The latter is my preference as I can top up rapidly.

So, my phone is microUSB (if you use an iDevice you'll need a Lightning cable) and so are the tablet, power brick, card reader and Bluetooth speaker. This means *one* charge cable for all these. But both the cameras – the Nikon and Fuji – have their own bulky charging blocks with two-core cables and three-pin plugs. I have a little more luck with my Sony Cyber-shot DSC-RX100 Mark II, which directly charges via a microUSB!

If you visit your favourite shopping site and search, you'll find microUSB chargers for every battery imaginable. This was the last link in the chain for simplification. And finally, what about the connection to the electrical outlet? You might have expected me to go for the Mu Traveller, but I've opted for a slightly less bulky multi-travel adapter (pictured) which goes from any plug to any plug for the princely sum of €10. But you'll have to make a trip to a tourist shop in the middle of Vienna, Austria, for this!

**Mike Smith** is a London-based wedding and portrait photographer. Visit [www.focali.co.uk](http://www.focali.co.uk)



Instead of buying a costly all-in-one travel charger, Mike has opted for a less bulky multi-travel adapter for his chargers

**Do you have something you'd like to get off your chest?** Send us your thoughts in around 500 words to the address on page 19 and win a year's digital subscription to AP, worth £79.99

## Social life

Here are some of our favourite images from the world of social media this week



## Instagram



**Daryll Jann** @darylljann

While sitting on the sandstone seat of Mrs Macquarie's Chair on a peninsula of Sydney Harbour in Australia, Daryll Jann offers a view of the sunset against Sydney Opera House. He has documented the view through his medium-format camera – an unusual technique.

Follow us at [amateurphotographer magazine](http://amateurphotographer magazine)



## Facebook



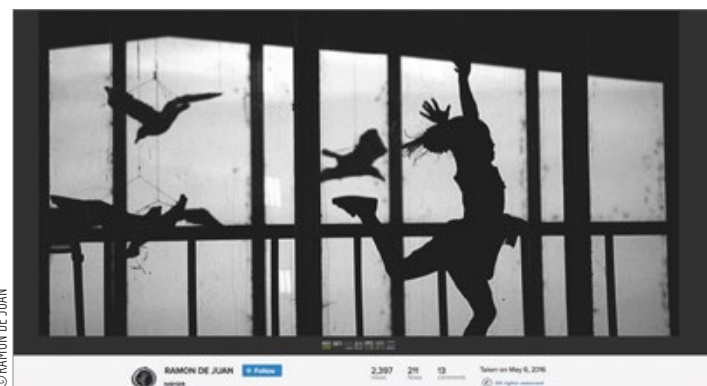
**Keith Fitzgerald**

Keith Fitzgerald captures the gaze of a male impala at the Lion Sands Game Reserve in South Africa. The soft background foliage is a perfect contrast to the strong form of the impala's body.

Like us on [www.facebook.com/amateurphotographer magazine](http://www.facebook.com/amateurphotographer magazine)



## Flickr



**Ramon De Juan**

This image by Ramon De Juan is titled 'Los Pájaros' (Spanish for 'The Birds'). It is an excellent example of how to achieve an effective silhouette. Ramon has exposed for the highlights, and in doing so rendered the frames of the windows, the dancer and our avian friends as beautiful graphic shapes.

Submit your photos to [apmag.co/flickr](http://apmag.co/flickr)



**Buy Now Pay Later with Zero Deposit**



## Pursue Perfection

The long awaited successor to the EOS 5D MK III is here  
30 Megapixel - 4K Video and much more

5D MK IV Body **£3,599.00**  
or pay from **£98.22** per month



Canon

## EOS 5DS

50.6 megapixel full frame CMOS sensor, print fine-art quality images to A0 and beyond.

The EOS 5DS will transform the way you look at the world.

**1 Year Interest Free**



EOS 5DS Body ..... **£2899.00**  
or pay from **£79.17** per month

## EOS 80D

Achieve the stunning results your creativity deserves with:

Impressive Speed  
Instinctive Controls  
Innovative technologies  
Wi-Fi

**Buy Now  
Pay in  
6 Months**

NEW



80D Body ..... **£1079.00** **£89.92 P/m**  
80D 18-55 IS STM Kit .... **£1088.00** **£90.67 P/m**  
80D 18-135 IS Kit ..... **£1329.00** **£110.75 P/m**

## Need advice on Canon lenses?

Speak to our Canon experts and get the most out of your EOS system.

We stock the entire range, all at great prices!



Canon EF 24-70mm f4L IS USM Lens ..... **£729.00** or pay **£19.90** per month  
Canon EF 24-70mm f2.8L II USM Lens ..... **£1729.00** or pay **£47.22** per month  
Canon EF 70-200mm F2.8L IS II USM Lens .. **£1789.00** or pay **£48.86** per month  
Canon EF 70-300mm f4-5.6L IS USM Lens .. **£1029.00** or pay **£42.88** per month  
\*Canon EF 100-400mm f4.5-5.6L IS II USM .. **£1799.00** or pay **£49.13** per month  
\*Multiple offers on the above lens including Part Exchange bonus

## EOS 7D Mark II

20.2 MP sensor  
Dual Processors  
Refined Capabilities  
Exhibition Quality Prints  
Geotag each image with built-in GPS

**0%  
INTEREST  
FREE**



7D MK II Body ..... **£1269.00** **£34.65 P/m**

## EOS-1DX Mark II

Seize the moment. Every. Single. One

20.2 MP sensor  
Exceptional Image Quality  
High Speed & Reliable

**1 YEAR  
INTEREST  
FREE**



1DX MKII Body **£5,579.00**  
or pay **£152.37** per month

Buy Now - Pay Nothing for 12 Months, means buy now and pay in full within one year, plus a £60.00 settlement fee and you will be charged absolutely no interest. Should the balance not be paid in full you will automatically enter into a loan agreement with 24 equal payments with a representative APR of 29.8%

Clifton Cameras Ltd is registered in England & Wales 5859660. Registered Office: 28 Parsonage Street, Dursley, GL11 4AA. Clifton Cameras Ltd acts as a credit broker and only offers credit products from Secure Trust Bank PLC trading as V12 Retail Finance. Clifton Cameras Ltd is authorised and regulated by the Financial Conduct Authority. Our registration number is 64436. Credit provided subject to age and status.



[www.cliftoncameras.co.uk](http://www.cliftoncameras.co.uk)

email: [sales@cliftoncameras.co.uk](mailto:sales@cliftoncameras.co.uk)

E&OE Prices correct at time of print but are subject to change

28 Parsonage Street  
Dursley  
Gloucestershire  
GL11 4AA

tel: 01453 548 128

OPENING HOURS  
MON - SAT 10AM - 5:30PM





NEW from  
the makers of  
PortraitPro



## Fast, easy landscape photo editing software

With intelligent controls that adapt to the features in your photo, LandscapePro allows you to get dramatic results with your landscapes.

- Intelligent selection tools.
- Unique editing controls that adapt to your photo.
- Easy-to-use slider interface.
- No technical skill required.
- Studio edition handles RAW files and can be run as a Photoshop or Lightroom plug-in.

**EXTRA 10% OFF  
CODE AP24916**

### Some of the things you can do with LandscapePro

- Sky controls: replace sky, change clouds and colour, cast cloud shadows
- Lighting: change light source, temperature, time of day, go from dawn to sunset
- Automatic area selection: tag areas as sky, trees, buildings, grass, sand, rock, water
- Targeted editing: specially designed controls for different areas
- Distance controls: highlight objects, add fog
- One click presets: wet sand, stormy water, red sunset, lush trees
- And more...



Front focusing means the camera focuses just in front of your intended target. Here, the strings of the fiddle are sharp rather than the musician's face



# Fine-tune your autofocus

Sometimes DSLR autofocus systems need a little adjustment to ensure the subject stays sharp.

**Angela Nicholson** explains all you need to know

**I**n many cases when you mount a new lens on your DSLR you'll find that it works perfectly with the autofocus (AF) system, and provided you've got the AF point over the correct part of the scene, it obtains a sharp subject. However, modern cameras and lenses are made on assembly lines and everything is manufactured within tolerance limits. This can mean that some lenses won't focus automatically quite as well as others. And if both your camera

and lens are a little out of kilter, but within their individual tolerance limits, you'll find that the subject never looks quite as sharp as you might hope.

Even if your camera and lens work in perfect harmony from the outset, a sharp knock, exposure to heat and the passage of time can see things change. A once-sharp lens can begin to deliver disappointing results with missed focus.

Thankfully, these days you don't always have to send your camera and lens to a

specialist to get them to play nicely together because many cameras now have an autofocus calibration system that lets you make the adjustments yourself.

## **We have a problem**

Ironically, the problem with inaccurate focus is often more noticeable with expensive lenses that have a large maximum aperture. With less expensive kit lenses that have relatively small maximum apertures the depth of field can mask any missed focus, so you and the camera get away with it. However, when shooting wide open with a more expensive and faster lens there's very little depth of field, so if the focus is just in front or behind the subject it will look a bit soft.

The issue is compounded by the use of full-frame sensors that result in less depth of field than APS-C-format sensors for any given aperture, subject distance and angle of view. The quick drop-off in





Focusing here is more accurate, with key areas staying critically sharp – the player's face is sharp, and draws the viewer's eye

© ANGELA NICHOLSON



➤ sharpness can make the missed focus very clear.

At first you may think that the subject moved a little or you just had the active AF point over the wrong point, but you'll soon realise that it's not you, the subject or your technique that's at fault. With flat scenes the subject will just look soft, but with scenes that have some depth with objects a little in front of and behind the intended focus target, you may notice that the wrong area is sharp. If a point just in front of the subject is sharp your lens is front focusing, but if a point behind the subject is sharp then it's back focusing.

### Take a view

When you shoot with a DSLR in reflex mode (using the viewfinder to compose images), the autofocus system's dedicated sensor mounted inside the camera detects when focus has been achieved. If there's even a tiny misalignment of this sensor, the mirror that reflects light onto it or the imaging sensor, the focus may be off with some lenses making the problem look worse than others.

In live-view mode DSLRs act like compact system cameras (CSCs) and the image that's shown on the rear screen is

## Putting it right

MANY enthusiast and advanced-level DSLRs allow you to calibrate the autofocus response for a number of lenses to correct for front or back focusing. Canon refers to this feature as AF Microadjustment, while Nikon calls it Auto Focus Fine Tune. The process itself isn't complicated, but it's fiddly and repetitive, with lots of shooting, checking images and reshooting.

Nikon introduced a new automated Fine Tune process with the D500 and D5 that simplifies matters considerably, so let's hope that other manufacturers develop something similar.

Autofocus calibration targets such as the Datacolor SpyderLensCal (around £50) are commercially available, but you can also make your own using charts that are freely available online for downloading and printing, such as the one from Andrew R Lawn at [www.squid.co.uk/photo/files/FocusChart.pdf](http://www.squid.co.uk/photo/files/FocusChart.pdf). If you don't want to do any printing you can use a ruler angled at 45° to the camera, but it pays to have some form of high-contrast focusing target level with the mid-point to give the camera's AF system a fighting chance.

## 'You'll soon realise that it's not you, the subject or your technique that's at fault'

provided by the imaging sensor itself. This means if the subject is sharp in live view, whether you focus automatically or manually, it will be sharp in the image. It also explains why CSCs don't suffer from the same focusing issues as DSLRs.

Live-view mode offers a convenient way of checking whether your camera's

AF system is focusing a lens correctly. All you need to do is shoot two images – one shot in live-view mode with the lens focused manually at the centre of a scene, and the other shot in reflex mode (with the image composed in the viewfinder) and using the AF system to focus at the centre of the scene. It's important to use the same aperture for each shot because lenses produce softer images when the aperture is wide open or very small. The aim is to produce two images that are identical apart from the fact that the focus was achieved in a different way.

When you examine the two images at 100%, if you find that the subject in the image that was focused automatically is softer than that in the image focused manually, the AF system will need to be adjusted.

## Alternative options

IF YOU don't fancy adjusting your camera's focusing system yourself, or if your camera doesn't offer the functionality, you can send it to the manufacturer's service centre or a registered service agent, such as Fixation ([www.fixationuk.com](http://www.fixationuk.com)), to do the work for you. Canon's service centre charges £60 to calibrate an EOS 5D Mark III and 24-70mm f/2.8 together, with an extra £30 being charged for every additional lens. Meanwhile, Nikon charges £72.47 to calibrate a D810 and 24-70mm f/2.8 VR, and while it can take 2-3 working weeks the company will endeavour to get your camera back to you if you have a specific event coming up.



## FINE-TUNING AF THE EASY WAY WITH THE NIKON D500



Nikon introduced a new automated AF fine-tuning system with the D5 and D500, which makes use of the live-view system. Here's how to use it with the D500.



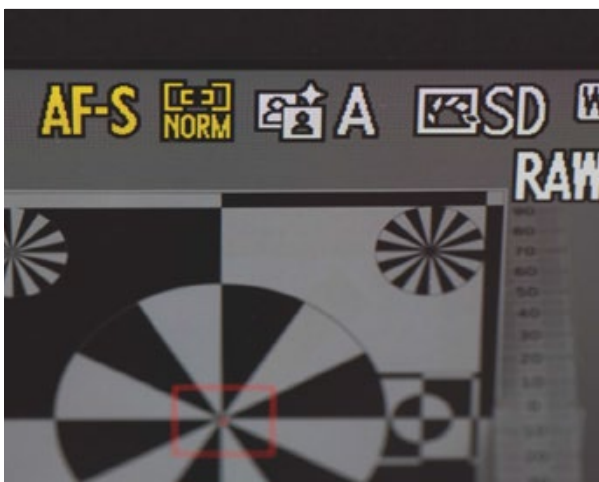
### 1 Find a high-contrast target

Mount the camera on a tripod and aim it at a flat high-contrast target that's parallel to the sensor. An AF calibration target is ideal, but you can shoot something when you're out with the camera. The target should be at a typical shooting distance for the lens.



### 2 Turn on live view

Now it's time to active live-view mode on the rear of the camera. The D500 uses the live-view mode to compare the focus on the image sensor with what you're getting on the autofocus sensor.



### 3 Make sure you're set to AF

Set the focus mode to autofocus and ensure the camera is set to single AF (AF-S) and wide or normal AF-area mode. It's easy to activate other AF options by mistake on higher-end cameras, so be careful you don't do this.



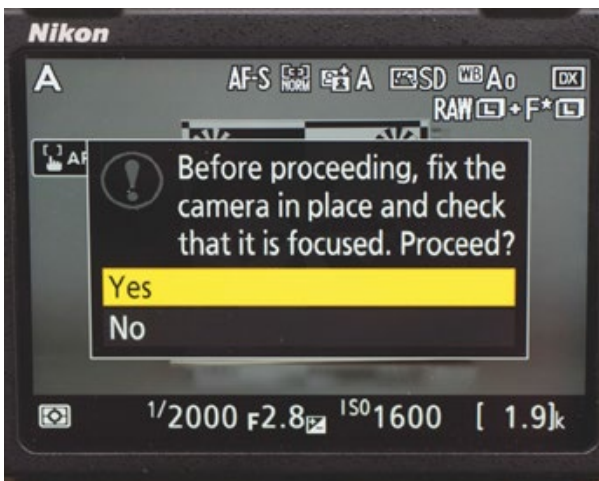
### 4 Go for the centre

Press the centre of the multi-selector to select the centre focus point. If at any time you get confused, always refer to the camera manual. AF adjustment is a complex area, so don't be too proud to dig out the instructions that came with your camera.



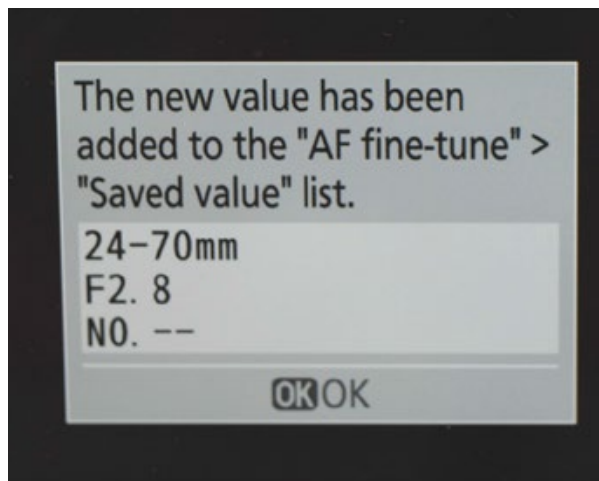
### 5 Half-way measures

The next job is to press the shutter release halfway, which will usually focus the lens (unless you have set up back-button focusing). Then, zoom in on the rear screen to confirm that the subject is in focus.



### 6 Double action

Press the AF-mode and movie-record buttons simultaneously and keep them pressed for a little over two seconds until the above dialogue box appears on-screen.



### 7 Save your values

Highlight Yes and press OK to save the fine-tuning value for the mounted lens (this only works with CPU lenses). Only one value is saved for each type of lens, so you can only calibrate zoom lenses once.



### 8 Check the menu

In the set-up menu, select AF fine-tune and highlight On before pressing OK. You should then be good to go. Zoom in carefully to your test images to see the differences in focus.



# CALIBRATING YOUR AF SYSTEM

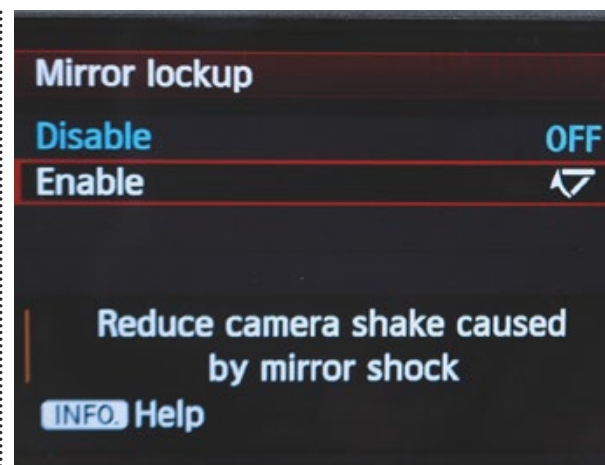


If you find your camera's AF system is front or back focusing and there's an option to adjust it in-camera, consult the manual for the precise process. In our example, we'll explain how to use the Canon EOS 5D Mark III's AF Microadjustment feature.



## 1 Set up the target

Assemble your calibration target and mount your camera on a sturdy tripod at least 25x the focal length of the lens away. With a 100mm lens this means positioning the camera at least 2.5m (8.2ft) from the subject. However, if you regularly shoot at a particular distance, it's worth moving to that point.



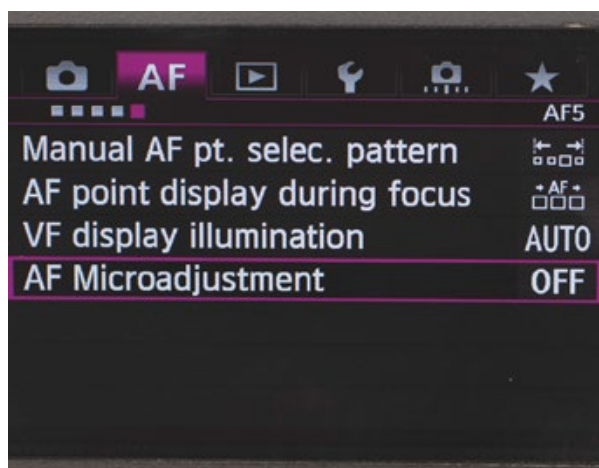
## 2 Lock up the mirror

Select mirror lock-up or exposure-delay mode and use a remote release to ensure that you get shake-free images. Even the tiniest hint of movement recorded by the sensor will make it very hard to calibrate your AF correctly.



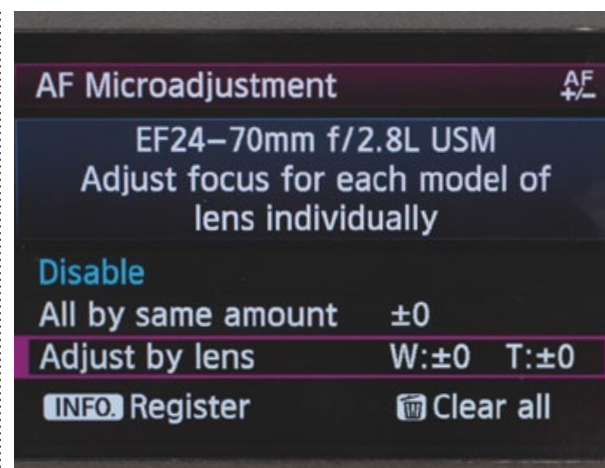
## 4 Check on the computer

Now open the images on your computer and examine them at 100% on-screen. Examine the sharp zone of the image and determine whether the camera is focusing the lens in front of or behind the intended target. In the above image, the camera is focusing in front of the target.



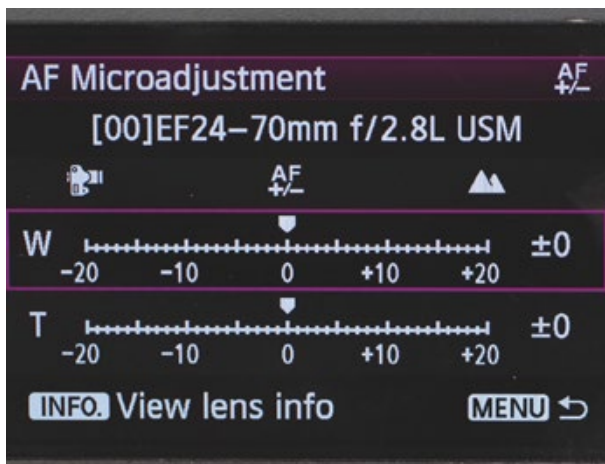
## 5 Open the menu

Next, open the camera menu and navigate to the fifth page of the AF options. AF Microadjustment is at the bottom of the list. Each camera is different, however, so check the manual



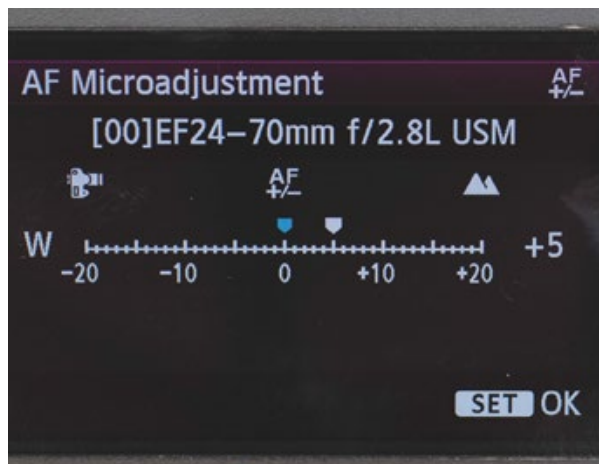
## 6 Assess the various options

Press Set and scroll down to Adjust by lens before pressing the Info button to access the options. Spend some time understanding everything properly as AF fine tuning is not something you want to get wrong.



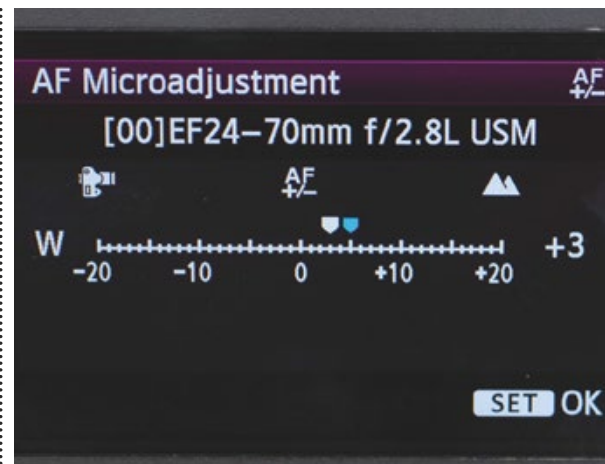
## 8 Zoom with a view

With zoom lenses you are able to adjust the focus point of the shortest and longest focal lengths independently, but just tackle one at a time. Use the scroll dial to select the focal length that you want to adjust, then press Set.



## 9 A matter of degree

Now use the main dial to set the degree of focus adjustment to apply, with  $\pm 5$  a good starting point. If the lens is front focusing you need to dial in a positive adjustment, while if it's back focusing you need to apply negative adjustment. Press Set followed by the Menu button to confirm the adjustment.



## 10 Perfecting the calibration

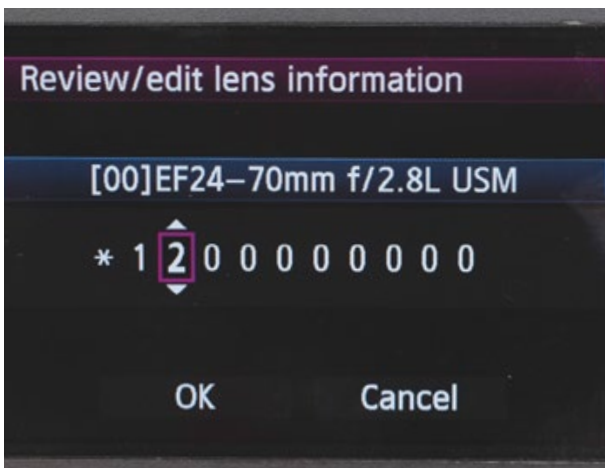
Shoot the calibration target again and examine the images to assess the effect of the adjustment. If necessary (and it probably will be), repeat the adjustment process to refine the calibration.





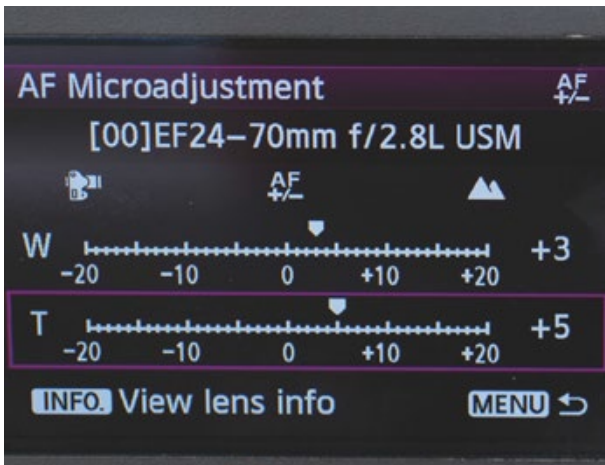
### 3 Shoot wide open

Set the camera to expose the subject correctly with the widest aperture selected. You shoot wide open to reveal any focusing inaccuracies. Looking through the viewfinder, put the centre AF point over the chart focus point (or the middle of the scale on the ruler) and take a shot.



### 7 Confirm your choices

Press the Info button again to review the lens information and check its serial number. If the number is not visible and you just see a series of zeros, use the Set button and main dial to enter the correct number. When you've finished, select OK to go back to the AF Microadjustment screen.



### 11 Repeat if necessary

If you are calibrating a zoom lens, repeat the adjustment process for the longest focal length, but only once you're happy that the lens is focusing in the right place at the shortest focal length.



## Not sure if you have an autofocus problem?

Follow these simple steps to produce images that will make it clear if your camera and lens combination is causing problems for the autofocus system

- 1 Find a suitable subject to photograph and mount your camera on a sturdy tripod.
- 2 Set the camera to expose the subject correctly when you have the widest aperture selected.
- 3 Activate live-view mode and switch to manual focusing. With the image magnified on the screen, focus carefully on the subject at the centre of the frame before taking a shot.
- 4 Now deactivate live-view mode and switch to autofocus mode. Use the central focus point in the viewfinder to focus on the same part of the scene as you did in live-view mode and take a shot.
- 5 Open the images on your computer and examine them at 100% on-screen. If you find that the subject in the image taken using autofocus looks softer than the one taken in live-view mode, you would need to tune the AF system.

## Third-party adjustments

ALTHOUGH it is possible to adjust the autofocus of third-party lenses in-camera, Sigma and Tamron offer alternative solutions. In 2013, Sigma introduced its USB Dock (around £39). This has a lens mount and enables owners of Sigma Art, Contemporary and Sports lenses to upgrade the firmware and customise the focusing via a USB connection to a computer running the company's Optimisation Pro software. However, the adjustment process still relies on you taking shots to test whether the level of alteration is correct, and then trying again until you eventually find the right setting.

Tamron's TAP-in Console was announced earlier this year and works in a similar way to the Sigma USB Dock, with some of the company's recently announced lenses using the TAP-in Utility software. We have yet to test it.

**Sigma's USB Dock is compatible with the following lenses.**

#### Art

20mm f/1.4 DG HSM | A, 24mm f/1.4 DG HSM | A, 30mm f/1.4 DC HSM | A, 35mm f/1.4 DG HSM | A, 50mm f/1.4 DG HSM | A, 18-35mm f/1.8 DC HSM | Art, 24-35mm f/2 DG HSM | A, 24-105mm f/4 DG OS HSM | A, 50-100mm f/1.8 DC HSM | A

#### Contemporary

17-70mm f/2.8-4 DC Macro HSM | C, 18-200mm f/3.5-6.3 DC Macro OS HSM | C, 18-300mm f/3.5-6.3 DC Macro OS HSM | C, 150-600mm f/5-6.3 DG OS HSM | C

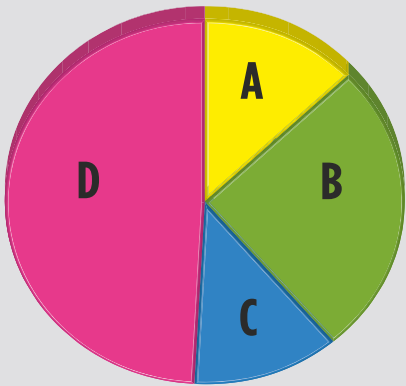
#### Sports

120-300mm f/2.8 DG OS HSM | S, 150-600mm f/5-6.3 DG OS HSM | S

**Tamron's TAP-in Console (TAP-01) is compatible with these lenses**

SP 85mm f/1.8 Di VC USD, SP 90mm f/2.8 Di Macro 1:1 VC USD, SP 45mm f/1.8 Di VC USD, SP 35mm f/1.8 Di VC USD





**In AP 3 September we asked**  
Can mirrorless cameras match DSLRs  
for your kind of photography?

**You answered...**

<b>A</b> No, and they never will	<b>13%</b>
<b>B</b> No, but I expect they will soon	<b>26%</b>
<b>C</b> Yes, and I plan to buy one for my next camera	<b>12%</b>
<b>D</b> Yes, and I've already switched	<b>49%</b>

**What you said**

'I still enjoy using my full-frame DSLR, but for day-to-day photography the default is my CSC.'

'There's nothing wrong with mirrorless, absolutely nothing, but for me they're physically too small and don't feel right in my hands. That's why I moved from mirrorless to DSLR!'

'I still have a DSLR, but I have not touched it in two years, so I can say the change has well and truly stuck.'

'As others have said, yes, mirrorless can probably match DSLRs technically for my kind of photography – mainly landscapes – but I still prefer the feel of a DSLR. So no option for me to vote. And I'm quite enjoying using rangefinders (coupled and uncoupled), and even scale-focus cameras, as well!'

'Just purchased a Panasonic Lumix DMC-GX8 and it does the job as a lightweight travel camera. Would I ditch the Canon EOS 5D Mark III? Never! By the way, the GX8 has an amazingly fast focus system and 8fps.'

**Join the debate on the AP forum**

**This week we ask**

What's the most amount of money  
you've ever paid for a lens?

**Vote online** [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk)

**Top news stories**

What's trending on the AP website



- 1 Canon targets photo enthusiasts with revamped Pixma inkjet printers
- 2 Tamron unveils revamped 150-600mm 'ultra-telephoto'
- 3 Amazing insect picture wins global contest
- 4 Camera seller Simply Electronics halts trading
- 5 Canon develops new sensor in bid to expand dynamic range

# Inbox

Email [amateurphotographer@timeinc.com](mailto:amateurphotographer@timeinc.com) and include your full postal address. Write to Inbox, Amateur Photographer, Time Inc. (UK), Pinehurst 2, Pinehurst Road, Farnborough Business Park, Farnborough, Hants GU14 7BF

**LETTER OF THE WEEK**

## Ansel Adams and the Grand Tetons

The Ansel Adams photograph of the Grand Tetons (pictured) in AP 27 August (*Big Picture*) is a fine example of the great man's work, but I respectfully suggest that the same view produced by Minor White in 1959 is equally worthy of attention. Much of Minor White's work had a mystical quality and his Grand Tetons photograph is emotionally compelling – capturing a brief moment when the magic casements of Keats opened to reveal a unique, other-worldly view.

**Peter McKenzie, Northumberland**

**I completely agree. Minor White's image contains so much of why we love landscape photography. The heavenly light spilling from the clouds to illuminate the landscape is a true demonstration of how a landscape will never look the same twice. No one will ever be able to take that image in exactly the same way. I think I actually prefer White's image. The sparse tonal**

**range emphasises the graphic qualities of the scene. There's a lot more room for viewers to use their imagination here, and I would argue, a lot closer to the much sought-after 'sublime' representation of the landscape. When it comes to scenes like this, it's easy for us to jump straight to Ansel Adams. But we risk missing other photographers who shot in the same location – Oliver Atwell, senior features writer**



© THE LIFE PICTURE COLLECTION/GETTY IMAGES



**Win!**

For high-quality photos and 4K UHD video recording, the Samsung 16GB PRO SDHC Class 10 card offers up to 90MB/s read and 50MB/s write speeds. Visit [www.samsung.com](http://www.samsung.com)

**SAMSUNG**

## Tribute to WEX

As a regular reader of AP for many decades, I really must compliment the magazine on the features and help it has provided me over the years. AP is a valuable reference for 'true amateurs' and those who like to follow more technical aspects of photography. I have been in touch with quite a few photographic dealerships over the decades, but here I pay special tribute to a fine institution called WEX. The staff at WEX go out of their way to provide an exceptional service to their customers and are deserving in my estimation of an award for most helpful beyond the call of duty. Their product knowledge is exceptional and their willingness to help potential and actual customers is

outstanding. I applaud WEX unreservedly.

One final thought to AP is this. It might prove helpful if the magazine was to involve amateurs more. This isn't a criticism. The insight of amateurs will be of help, I'm sure. Maybe a page for amateur comments?

**J Thomas, Porth, Wales**

**Good to hear you enjoy the magazine, and that you've had such great service from WEX. Thank you for writing in to tell us. And thanks for your suggestion on a page for amateur comments. We do have a Poll of the Week in Inbox, where we ask readers for their opinions on various topics. You can check it out online at [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk).**

**[co.uk/forums/forums/weekly-poll.60](http://co.uk/forums/forums/weekly-poll.60). Or you can submit your opinion or views on Viewpoint in 7 Days as well – Andy Westlake, technical editor**

## World Cup feature

It's not that we're not grateful to you for another reminder of your World Cup win a long time ago, but perhaps the introduction to your piece *Fever pitch* (AP 16 July) should have said 'the most important game ever played in England'. **Stuart Neville, West Dunbartonshire**

## Equivalent apertures

I read the article *Equivalent apertures* (AP 23 July) with interest. In relation to prime lenses, if using a full-frame lens on a smaller format body,



could you achieve sharper images as well as a wider range of 'usable' apertures (for a maximum depth of field)? By utilising only the sharper centre of a larger format lens rather than the lens designed for the format, would pictures be sharper across the image frame for every aperture compared to the 'equivalent aperture' of the smaller lens?

Also, would you get away with a slightly larger 'equivalent aperture' for a given depth of field (when limited by minimum shutter speed), as the edges of the image would not be as 'soft' (this softness giving the impression of the loss of depth of field). Would you be able to use a slightly smaller 'equivalent aperture' before diffraction takes effect

at the edges of the image frame? Or are the best smaller format lenses so good that any real-world advantage is negligible? If there is some value to be had, what of using medium format lenses on full-frame bodies?

**Paul Haywood, Ireland**

**The concept of equivalent apertures relates to the camera's sensor size, not the lens used on it. If you use a full-frame lens on an APS-C camera, you still have to think in exactly the same way about the best choice of aperture as if you're using a lens purpose-designed for the sensor size. For example if you're a Canon user, a full-frame EF lens will show just the same amount of diffraction blur**

**at any given aperture as an APS-C optimised EF-S lens. Diffraction blurring becomes more visible on the smaller sensor because you're effectively cropping and enlarging the image.**

**Equally, while you might have read discussions about getting better results on APS-C by using the 'sweet spot' of a full-frame lens and cropping away the edges, objective testing reveals that this usually isn't true. Assuming you'll be comparing images at the same size, lenses designed for smaller sensors need to be sharper – the smaller sensor needs them to resolve finer detail. Normally, lenses work best on the format for which they've been designed and sensors give the best results with lenses that have been purpose-designed for them**  
**Andy Westlake, technical editor**



Equivalent apertures relates to the camera's sensor size, not the lens used on it

## In next week's issue On sale 27 September



© GAVIN MILLS

### Fujifilm X-T2 review

Michael Topham finds out if the X-T2 lives up to the hype

**Tips from Magnum greats**  
Words of advice from some of Magnum's top photographers – past and present

**Epson Expression Photo XP-960 printer**  
Vincent Oliver tests an all-in-one photo printer from Epson

## Hit the street

Three leading exponents share their tips for great candid shots and street portraits

### Contact

**Amateur Photographer, Time Inc (UK) Ltd, Pinehurst 2, Pinehurst Road, Farnborough, Hampshire GU14 7BF**  
**Telephone** 01252 555 386  
**Email** [amateurphotographer@timeinc.com](mailto:amateurphotographer@timeinc.com)  
**Picture returns: telephone** 01252 555 378  
**Email** [appicturedesk@timeinc.com](mailto:appicturedesk@timeinc.com)

### Subscriptions

**Enquires and orders email** [help@magazinesdirect.com](mailto:help@magazinesdirect.com)  
**Alternatively, telephone** 0330 333 1113 **overseas** +44 330 1113 (lines open Mon-Fri GMT 8.30am-5.30pm excluding bank holidays)  
One year (51 issues) UK £155.50; Europe €259; USA \$338.99; Rest of World £221.99

### Test Reports

Contact OTC for copies of AP test reports. **Tel:** 01707 273 773

### Advertising

**Email** [paul.ward@timeinc.com](mailto:paul.ward@timeinc.com)  
**Inserts**  
**Call** Mona Amarasakera, Canopy Media, on 0203 148 3710

### Editorial team

<b>Group Editor</b>	Nigel Atherton
<b>Group Editor's PA</b>	Christine Lay
<b>Technical Editor</b>	Andy Westlake
<b>Deputy Technical Editor</b>	Michael Topham
<b>Technique Editor</b>	Tracy Calder
<b>Senior Features Writer</b>	Oliver Atwell
<b>News Editor</b>	Chris Cheesman
<b>Production Editor</b>	Lesley Upton
<b>Chief Sub Editor</b>	Jolene Menezes
<b>Art Editor</b>	Sarah Foster
<b>Senior Designer</b>	Robert Farmer
<b>Studio Manager</b>	Andrew Sydenham
<b>Picture Researcher</b>	Rosie Barratt
<b>Online Manager</b>	Karen Sheard
<b>Digital Production Editor</b>	Jacky Porter
<b>Photo-Science Consultant</b>	Professor Robert Newman
<b>Senior contributor</b>	Roger Hicks

**Special thanks to The moderators of the AP website** Andrew Robertson, Lisadb, Nick Roberts, The Fat Controller

### Advertising

<b>Head of Market</b>	Paul Ward	01252 555 342
<b>Head of Market</b>	Justeen Jones	01622 861 148
<b>Account Manager</b>	Liz Reid	01252 555 354
<b>Media Advisor</b>	Lucy Willans	01252 555 348
<b>Media Advisor</b>	Tommy Sullivan	01252 555 344
<b>Production Coordinator</b>	Dave Smithers	0203 148 2674

### Marketing

<b>Marketing Manager</b>	Samantha Blakey	01252 555132
--------------------------	-----------------	--------------

### Publishing team

<b>Chief Executive Officer</b>	Marcus Rich
<b>Group Managing Director</b>	Oswin Grady
<b>Managing Director</b>	Simon Owen
<b>Group Magazines Editor</b>	Garry Coward-Williams

**Printed in the UK by the Wyndeham Group**

**Distributed by Marketforce**, 5 Churchill Place, London E14.  
**Telephone** 0203 787 9001

### Editorial Complaints

We work hard to achieve the highest standards of editorial content, and we are committed to complying with the Editors' Code of Practice (<https://www.ipso.co.uk/IPSO/cop.html>) as enforced by IPSO. If you have a complaint about our editorial content, you can email us at [complaints@timeinc.com](mailto:complaints@timeinc.com) or write to Complaints Manager, Time Inc. (UK) Ltd Legal Department, Blue Fin Building, 110 Southwark Street, London, SE1 0SU. Please provide details of the material you are complaining about and explain your complaint by reference to the Editors' Code. We will endeavour to acknowledge your complaint within 5 working days, and we aim to correct substantial errors as soon as possible.

All contributions to Amateur Photographer must be original, not copies or duplicated to other publications. The editor reserves the right to shorten or modify any letter or material submitted. Time Inc. (UK) or its associated companies reserves the right to re-use any submission sent to the letters column of Amateur Photographer magazine, in any format or medium, WHETHER PRINTED, ELECTRONIC OR OTHERWISE. Amateur Photographer is a registered trademark of Time Inc. (UK). © Time Inc. (UK) 2016 Amateur Photographer (incorporating Photo Technique & Camera Weekly) Email: [amateurphotographer@timeinc.com](mailto:amateurphotographer@timeinc.com) Website: [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk) Time Inc. switchboard tel: 0203 148 5000 Amateur Photographer is published weekly (51 issues per year) on the Tuesday preceding the cover date by Time Inc. (UK), Blue Fin Building, 110 Southwark Street, London SE1 0SU. Distributed by Marketforce (UK) Ltd, 5 Churchill Place, London E14. ISSN 0002-6840. No part of this publication may be reproduced, stored in a retrieval or transmitted in any format or medium, whether printed, electronic or otherwise, without the prior written permission of the publisher or the editor. This is considered a breach of copyright and action will be taken where this occurs. This magazine must not be lent, sold, hired or otherwise disposed of in a mutilated condition or in any authorised cover by way, or by trade, or annexed to any publication or advertising matter without first obtaining written permission from the publisher. Time Inc. (UK) Ltd does not accept responsibility for loss or damage to unsolicited photographs and manuscripts, and product samples. Time Inc. (UK) reserves the right to use any submissions sent to Amateur Photographer Magazine in any format or medium, including electronic. One-year subscription (51 issues) £155.50 (UK), €259 (Europe), \$338.99 (USA), £221.99 (rest of world). The 2015 US annual DEU subscription price is \$338.99, airfreight and mailing in the USA by named Air Business Ltd, c/o Worldnet Shipping Inc, 156-15, 146th Avenue, 2nd floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. US Postmaster: Send address changes to Amateur Photographer, Air Business Ltd, c/o Worldnet Shipping Inc, 156-15, 146th Avenue, 2nd floor, Jamaica, NY 11434, USA. Subscriptions records are maintained at Time Inc. (UK), Blue Fin Building, 110 Southwark Street, London, SE1 0SU. Air Business Ltd is acting as our mailing agent.

**Time Inc.**





# Classglass

**‘Spend it on the lens’** goes the famous adage. So what lenses do award-winning shooters from a variety of genres use, and why?

## Mark Benham markbenham.co.uk



MY MAIN lens is the Canon EF 24-105mm f/3.5-5.6 IS STM. It's a very practical lens as it's stabilised and offers both zoom and wideangle options,

so you can take it anywhere, which is great. However, I shot the winning image for this year's Pink Lady Food Photographer of the Year competition (below) with a Canon EF 50mm f/1.8 STM. You can easily get this for under £100 if you shop around and it's a bargain – an ideal first lens to go alongside your kit lens. It's very light but also very sharp for the money, with

**Below: Fast, light and sharp, the Canon 50mm is perfect for grabbing decisive moments**

great optics. Remember, 50mm is a classic focal length for portraits. There is so much clarity with prime lenses but relatively little distortion. Using f/1.8 is also wide enough for me at the moment. So it just goes to show that you don't need to spend a bomb on lenses, but choose wisely.

● £335 (24-105mm), £93 (50mm) ● [www.canon.co.uk](http://www.canon.co.uk)



© MARK BENHAM



## Jeremy Walker

jeremywalker.co.uk



MY FIRST favourite is the Nikon PC-E Micro Nikkor 45mm f/2.8D ED Tilt-Shift lens. As a landscape photographer most readers would probably expect me

to be using the 24mm Tilt-Shift, but the 45mm fits the way in which I see the world and the way I work. Not only does the lens have the rise and fall for use in architectural photography (rise and fall negates converging or diverging uprights on buildings), but it's extremely useful if your landscape has verticals such as trees, or you want to get rid of foreground without actually pointing the camera upwards. The 45mm PC-E also has a tilt mechanism that allows the front elements to be tilted forward, which can allow greater control

over the depth of focus. Optically, the lens is stunning (although it's only manual focus) and it's a brilliant macro lens – great for details and close-ups.

My second favourite lens is the Nikon AF-S Nikkor 24-70mm f/2.8G ED zoom – my 'go-to' lens, along, I suspect, with many other professional photographers. It's wide enough for landscapes and long enough for portraits without being on top of your subject, so it's a great all-rounder. Meanwhile, the fast aperture sucks in light while making it straightforward to blur out the background in portraits. I also use the 24-70mm for creating stitched panoramas. But for panorama stitching I never use a focal length wider than 35mm. Going wider may lead to distortion, as would happen on any wideangle.

● £1,660 (45mm), £1,200 (24-70mm) ● [www.europe-nikon.com](http://www.europe-nikon.com)



© JEREMY WALKER



© CHRIS WESTON

Above: A long fast lens is exactly what you want when a lion is heading your way

## Chris Weston

chrisweston.photography



MOST people consider wildlife photography to be the realm of super-long telephoto lenses, fast primes and zooms up to 600mm and more.

But my all-time favourite lens for wildlife is a Fujinon XF 35mm f/1.4 R – equivalent to a 50mm 'standard' lens. Such a short focal length means I have to allow wildlife to come close to me, which takes time, patience and field craft. The beauty of this lens is that it records images very close to how we see it. There's no wideangle distortion or the contracting of spatial relationships you get from using telephotos.

That said, my workhorse lens is the Fujinon XF 50-140mm f/2.8 R medium (equivalent to a 70-200mm f/2.8 medium telephoto zoom). This is a fast zoom lens that gives me greater flexibility when setting exposures; it's also relatively small and light, which is useful in tough environments. Both lenses bring out the best from the sensor.

● £360 (35mm), £1,150 (50-140mm) ● [www.fujifilm.eu/uk](http://www.fujifilm.eu/uk)

Left: Decaying fishing boat stranded on a beach, taken handheld with Jeremy's 24-70mm





## Kevin Mullins

kevinmullinsphotography.  
co.uk



AS A documentary wedding and event photographer, my favourite lenses are the Fujinon XF 23mm f/1.4 R and the Fujinon XF 56mm f/1.2 R. When

I used an SLR, I always used a 35mm and an 85mm, so this is the closest I can get on Fujifilm's system. The 23mm gives me a close field of view, while the 56mm lets me get in more of the scene. For wideangle images I also use a Fujifilm X70 compact camera with a 14mm wideangle adapter, so I can get in close and shoot from the hip.

I shoot at wide-open apertures most of the time. I use back-button focusing so I can lock focus and recompose. With new Fujifilm lenses I can shoot at 1/32,000sec, so I don't worry about shooting wide open on a sunny day. Also, f/1.2 on my 56mm lens is still only equivalent to f/1.8 on a full-frame SLR. I have never used zooms – I want uniformity in my images,



which clients can then see on my website so they know what they are getting. With zoom lenses there are too many permutations and distortions.

- £669 (23mm), £680 (56mm)
- [www.fujifilm.eu/uk](http://www.fujifilm.eu/uk)

**Above: The 56mm picks out 'moments' in an unobtrusive manner**

**Below: A hoverfly covered in pollen, shot with Heather's 105mm**

## Heather Angel

heatherangelphotography.  
co.uk



MY FAVOURITE lens has been Nikon's Micro-Nikkor 105mm ever since it was released. It has been my choice for macro work, both in the field and in my

studio, and my current model is the AF-S VR Micro-Nikkor 105mm f/2.8G IF -ED. I used it while working on two pollination projects for Kew (my book *Pollination Power* published in 2015) that required detailed anatomical shots of flowers and action shots of pollinators. The 105mm lens allows speedy adjustment from AF to manual focus, which I need for intricate flower shots. It also provides a greater working distance from the front of the lens and the subject than the AF Micro-Nikkor 60mm f/2.8D lens at 1:1 magnification. This gives more space for positioning a reflector to boost natural light. The longer macro lens is also ideal for capturing insect pollinators on flowers.

For bird pollinators on flowers, I use the AF-S Nikkor 70-200mm f/2.8G ED VR II. When used with the TC-20E III teleconverter, it becomes effectively a 70-400mm lens, and the VR means handheld shots are possible. This lens is also useful for larger butterflies that move speedily.

- £619 (105mm), £399 (60mm), £1,799 (70-200mm)
- [www.europe-nikon.com](http://www.europe-nikon.com)





## John McMurtrie

picturedesk.co.uk



I'M A music photographer and official shooter for metal legends Iron Maiden, and my all-time favourite lens is the Nikon AF-S Nikkor 70-200mm f/2.8G ED VR II. I won't attempt to shoot a live show without it. At a gig you can't always get close to a subject because of the height of the stage, and having the extra focal length usually allows me to get close crops on a singer's face and full frame on a guitarist.

For a head-shot front cover I shoot a lot of frames. There are several reasons why I use a longer focal length. First, I am further away from my subject; I don't want to be so close that I am breathing in their face. Second, the longer focal length compresses perspective and makes them look slimmer. Last, together with a wide aperture it throws the background out of focus and really makes a portrait zip!

● £1,799 (70-200mm) ● [www.europe-nikon.com](http://www.europe-nikon.com)

**Right: Long, fast, stable and sharp – the perfect lens for gig photography**



© JOHN MCMURTRIE



© DAMIAN SHIELDS

## Damian Shields

damianshields.photoshelter.com



THE Nikon AF-S Nikkor 70-200mm f/2.8G ED VR II is my travelling lens, and is attached to my Nikon D800 before I go anywhere. I also like to keep the lens on the camera while moving around

on foot for the same reason. There are many opportunities for images while making my way from A to B. The added bonus of VR helps in these handheld situations and the lens focuses really quick to target.

What's more, image sharpness from 70-200mm is crisp right across the image with only slight falloff when shooting at the longer end. As well as one always on the camera, I also have an extra tripod plate attached to the lens to avoid

continually switching the one plate between set-ups. My second favourite is the Sigma 24-70mm f/2.8 IF EX DG HSM. It's just as well suited to handheld shooting as the Nikon but lacks VR. It has great sharpness across the frame, and I love being able to switch between manual and autofocus by sliding the barrel.



**Above: The Pass of Glencoe, taken with Damian's trusty Sigma 24-70mm**

● £1,770 (70-200mm), £526 (24-70mm) ● [www.canon.co.uk](http://www.canon.co.uk), [www.sigma-global.com/en](http://www.sigma-global.com/en)



## Adrian Dennis

adriandennis.com



AS I work for a news agency, I'd have to say the Canon EF 70-200mm f/2.8L IS II USM is one of my favourite lenses – you'll find it in most press photographers' bags. The lens is very versatile as a lot of press work is done within this focal length range. It's sharp and the autofocus is good; it also has the advantage of an image stabiliser for when you're shooting in very low light or using particularly long exposures. Moreover, when you have to be

mobile carrying two cameras – one with a wideangle and the other with the 70-200mm – you're covered for most eventualities. If you're really stuck for needing a long lens, the telephoto zoom works well with a teleconverter for when you need just that little bit more.

Another lens that is dear to my heart is the Canon EF 400mm f/2.8L IS II USM super-telephoto lens. Most football and rugby in the UK is shot with this lens, usually in conjunction with the 70-200mm. I spend a good deal of my time on the sidelines, and I'm looking to capture the action using fast shutter speeds with the lens 'wide open'. The idea is to keep the viewer's attention on the

**Below: The 70-200mm is very versatile, giving vital extra reach without weighing you down**

sharp players while the background 'blows out' into clean even tones.

● £1,772 (70-200mm), £8,350 (400mm) ● [www.canon.co.uk](http://www.canon.co.uk)



© ADRIAN DENNIS



© SUE O'CONNELL

## Sue O'Connell

sueoconnell.photography



AS A travel photographer (not a weightlifter!), my choice of lenses will always be a compromise between speed and portability. Fortunately, increased ISOs and improved stabilisation make this less of an issue these

days. My go-to lens is the Canon EF 24-105mm f/4L IS USM. It has the perfect combination of range and quality, and I used it to shoot award-winning images in the Travel Photographer of the Year and National Geographic Traveller competitions. This lens is more or less permanently attached to my Canon EOS 6D (full-frame) body, taking complete advantage of its wideangle capability.

**Above: The 16-35mm is great for tight interior shots, as we can see in this fish-market scene**

My other regular lens is the Canon EF 16-35mm f/2.8L II USM, which is a great ultra-wide zoom. It's expensive but fast, silent, accurate, a joy to handle and responsible for many award-winning images. This has served me particularly well in Myanmar [Burma], both in tight interior contexts and to add drama to close-ups.

● £727 (24-105mm), £1,060 (16-35mm) ● [www.canon.co.uk](http://www.canon.co.uk)





## Circular Filters

### ND1000



Our award winning 10 stop long exposure filter

★★★★★ - Photoplus

46mm.....£24.95	62mm.....£29.95
49mm.....£25.95	67mm.....£31.95
52mm.....£26.95	72mm.....£32.95
55mm.....£27.95	77mm.....£34.95
58mm.....£28.95	82mm.....£39.95

Best Value in Photoplus Big Stopper Group Test

### ND Fader Filters

46mm.....£29.95	62mm.....£35.95
49mm.....£31.95	67mm.....£36.95
52mm.....£32.95	72mm.....£37.95
55mm.....£33.95	77mm.....£39.95
58mm.....£34.95	

★★★★★ - AP Mag 4 stars for quality & value

### ND Filters

Sizes: 27 to 82mm	Grads: 0.3 0.6 0.9 1.2
46mm.....£13.95	62mm.....£19.50
49mm.....£14.50	67mm.....£20.50
52mm.....£15.50	72mm.....£22.50
55mm.....£16.50	77mm.....£24.50
58mm.....£17.50	82mm.....£29.50

★★★★★ - Digital Camera 5 stars in DC's ND Group Test

### Circular Polarisers

"Highly Rated"  
- Practical Photography June, 2016

Sizes: 25 to 86mm	
49mm.....£16.95	67mm.....£19.50
52mm.....£17.50	72mm.....£19.95
55mm.....£17.95	77mm.....£22.50
58mm.....£18.50	82mm.....£24.95
62mm.....£18.95	86mm.....£29.95

### UV Filters

Sizes: 25 to 105mm

46mm.....£12.50	62mm.....£14.95
49mm.....£12.95	67mm.....£15.95
52mm.....£13.50	72mm.....£16.95
55mm.....£13.95	77mm.....£18.95
58mm.....£14.50	82mm.....£20.95

### ND Grad Filters

Sizes: 40 to 82mm	Grads: 0.3 0.6 0.9 1.2
46mm.....£16.50	62mm.....£20.95
49mm.....£16.95	67mm.....£21.95
52mm.....£17.95	72mm.....£22.95
55mm.....£18.95	77mm.....£23.95
58mm.....£19.95	82mm.....£24.95

### More Filters...

visit [srb-photographic.co.uk](http://srb-photographic.co.uk) for more info

Infrared Filters .....from £19.95  
Skylight Filters .....from £9.95  
Black & White Filters .....from £7.50  
Colour Grad Filters .....from £14.95  
Star Effect Filters .....from £12.95

## Square Filters

### Pro Square Filter Holders

★★★★★ Best Value  
- NPhoto Magazine



### NEW Pro Aluminium Holders!

A Size Pro Holder.....£19.95
P Size Pro Holder.....£24.95
P Size W/A Pro Holder.....£24.95

### Square Filter Holders

A Size Holder.....£8.95
P Size Holder.....£4.95
P Size W/A Holder.....£4.95
Adaptor Rings.....£4.95

### Square Filter Kits

*A Size Starter Kit.....£24.95
A Size Filter Kit.....£39.95
*P Size Starter Kit.....£24.95
P Size Filter Kit.....£39.95

\*Featured in three of the best ND Kits  
- Practical Photography June, 2016



### Individual Square Filters

0.3 Full ND.....£13.50	0.9 Hard ND Grad.....£13.50	0.3 ND Glass Pro.....£29.95
0.6 Full ND.....£13.50	1.2 Hard ND Grad.....£15.95	0.9 ND Glass Pro.....£29.95
0.9 Full ND.....£13.50	Circular Polariser.....£26.00	
1.2 Full ND.....£15.95	Blue Grad.....£13.50	
0.3 Soft ND Grad.....£13.50	Sunset Grad.....£13.50	
0.6 Soft ND Grad.....£13.50	Twilight Grad.....£13.50	
0.9 Soft ND Grad.....£13.50	Black & White Filters.....£13.50	
1.2 Soft ND Grad.....£15.95	4x Star Effect.....£13.50	
0.3 Hard ND Grad.....£13.50	6x Star Effect.....£13.50	
0.6 Hard ND Grad.....£13.50	P Size Diffusion Filter.....£12.50	

★★★★★ - Digital Photo for build, image quality & value  
- April, 2014

Sizes: A Size & P Size

## Close up & Macro

### Close up Lens Sets



Each set includes four close up lenses with upto +17 diopter and a protective case

★★★★★ - Photo Plus

52mm.....£19.95	67mm.....£23.95
55mm.....£20.95	72mm.....£24.95
58mm.....£21.95	77mm.....£25.95
62mm.....£22.95	

### Auto Extension Tubes

Set of 3 tubes

Canon EOS.....from £29.95	Nikon.....£54.95
Canon EOS-M.....£49.95	Pentax Q.....£49.95
Micro 4/3.....£49.95	Sony Alpha.....£54.95
Nikon 1.....£49.95	Sony NEX.....£49.95

### Manual Extension Tubes

Canon EOS.....£17.50	Olympus 4/3.....£17.50
Micro 4/3.....£17.50	Sony Alpha.....£17.50
Nikon.....£17.50	

## Lee Filters 100mm System

Adaptors Rings.....from £20.00
Foundation Kit.....£59.95
Professional Kit.....£115.00
ND Grad Sets.....£199.00
Individual Filters.....from £75.00
Big Stopper.....£104.95
Little Stopper.....£95.99
Landscape Polariser.....£173.99



EXCLUSIVE Lee Filters 100mm Starter Kit  
from £139.95

## Lee Filters Seven5 System



Adaptor Rings.....£17.50
Starter Kit.....£109.00
ND Grads.....£52.00
ND Filters.....£64.95
Big Stopper.....£65.00
Little Stopper.....£68.00
Polarisers.....£190.00
Deluxe Kit.....£460.00

## Lee Filters SW150 System



SW150 Mark II Holder  
£150.00

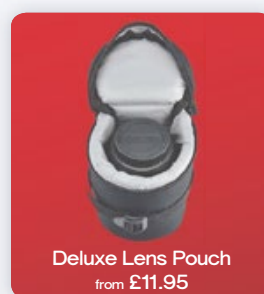
SW150 Mark II Adaptors
Nikon 14-24mm.....£89.95
Canon 14mm.....£89.95
Sigma 12-24mm.....£89.95
Samyang 14mm.....£89.95
Tamron 15-30mm.....£89.95
Tokina 16-28mm.....£89.95
SW150 Field Pouch.....£47.95

## Lens/Camera Adaptors

Camera	Lens	£	Camera	Lens	£
Canon EOS	M42	£16.95	Micro 4/3	Nikon	£29.95
Canon EOS	Nikon	£22.95	Micro 4/3	Nikon G	£34.95
Canon EOS	Nikon G	£39.95	Micro 4/3	M42	£29.95
Canon EOS	Pentax K	£24.95	Micro 4/3	Olympus OM	£29.95
Canon EOS	Olympus OM	£24.95	Micro 4/3	Minolta MD	£29.95
Canon EOS	Con/Yash	£24.95	Micro 4/3	Leica R	£29.95
Canon EOS	Leica R	£22.95	Micro 4/3	Leica M	£29.95
Canon EOS	Leica M	£24.95	Micro 4/3	Sony Alpha	£34.95
Canon EOS	Canon FD	£44.95	Micro 4/3	Pentax K	£29.95
Canon EOS-M	Canon EOS	£29.95	Micro 4/3	Canon FD	£29.95
Canon EOS-M	Leica M	£29.95	Micro 4/3	Con/Yash	£29.95
Canon EOS-M	Nikon	£29.95	4/3	M42	£17.95
Canon EOS-M	Canon FD	£29.95	4/3	Con/Yash	£22.95
Canon EOS-M	C Mount	£29.95	4/3	Leica R	£22.95
Canon EOS-M	M39	£29.95	4/3	Nikon	£22.95
Canon EOS-M	M42	£29.95	4/3	Olympus OM	£22.95
Fuji X	M42	£24.95	4/3	Pentax K	£22.95
Fuji X	Leica M	£29.95		M42	£18.95
Fuji X	Nikon	£29.95		Nikon	£44.95
Fuji X	Canon EOS	£29.95		Sony Alpha	£44.95
Fuji X	Olympus OM	£29.95		Canon FD	£44.95
Fuji X	Canon FD	£29.95		M42	£15.95
Fuji X	Con/Yash	£29.95		Minolta MD	£44.95
Nikon	M42	£24.95		Nikon	£44.95
Nikon	Canon FD	£44.95		Pentax K	£44.95
Nikon	C Mount	£32.95		Canon FD	£44.95
Nikon 1	M42	£24.95		Canon EOS	£29.95
Nikon 1	M39	£22.95		Nikon	£29.95
Nikon 1	Nikon	£29.95		Sony Alpha	£34.95
Nikon 1	Canon EOS	£44.95		Olympus OM	£29.95
Nikon 1	Pentax K	£29.95		Pentax K	£29.95
Nikon 1	Leica M	£39.95		Leica M	£29.95
Nikon 1	Leica R	£37.95		Leica R	£29.95
Nikon 1	Con/Yash	£23.95		Canon FD	£42.95
Micro 4/3	Canon EOS	£29.95		Sony NEX	£23.95

With our on-site engineering factory we can help! Visit [srb-photographic.co.uk](http://srb-photographic.co.uk) for more info

## Accessories



Deluxe Lens Pouch  
from £11.95

In-It Lens Pocket.....NEW from £3.95
Microfibre Cloths.....from £1.50
Ollclip Lenses.....from £59.95
Lens Pouch.....from £8.50
Deluxe Lens Pouch.....from £11.95
Circular Filter Pouch.....£5.95
Square Filter Wallet.....£9.95
Square Filter Case.....£1.95
Lightning Sensors.....£64.95
Selfie Stick Bundle.....£9.95
Bluetooth Remotes.....£3.95
OpTech Straps.....from £9.99
Camera Spirit Levels.....from £3.50

In-It Camera Wrap.....NEW from £8.95
Lens Pen.....£4.95
Cleaning Kits.....from £5.95
Dust Blowers.....from £3.50
Cleaning Solution.....£4.95
Memory Card Cases.....£9.95
Reflector Kits.....£8.95
Rainsleeves.....Pack of 2.....£5.95
White Balance Caps.....£9.95
Filter Stack Caps.....from £10.95
Angled View Finder.....£39.95
DC Compact Mount.....£17.95
Circular filter Wraps.....£9.95

### Caps & Hoods

Lens Caps.....£3.95
Body Caps.....£3.50
Rear Lens Caps.....£3.50
Petal Hoods.....from £10.95
Rubber Lens Hoods.....£4.95
Metal Hoods.....from £5.95
Body & Rear Sets.....£5.95

### Self Take Kits

DSLR Self Kit.....£34.95
Compact Self Kit.....£24.95
Angled Self Kit.....£34.95



Three Filter Wallet  
£4.95

## Tripods & Mounts



NEW 28mm On-It Carbon Fibre Tripod  
only £149.95

★★★★★ - Practical Photo, Jan 2016



NEW 25mm On-It Carbon Fibre Tripod  
£119.95

colours: Red, Blue, Black

On-It Monopod.....NEW £24.95
Travel Tripod.....£9.99
Tripod Lens Mount.....£49.95
Binocular Brackets.....£9.99
Window Mount.....£24.95
Dash Mount.....£9.95
Universal Tripod Mount.....£46.00



# Grays of Westminster<sup>®</sup>

Exclusively... **Nikon**



Nikon D500

## THE TREASURE HOUSE OF **Nikon**

### WANTED FOR CASH: **Nikon**

We are always seeking mint or near-mint examples of Nikon equipment: Digital & Film SLRs, Nikkor Lenses: autofocus & manual focus. We also take in certain non-Nikon, such as Leica (M-only), Hasselblad and Rolleiflex.

Please telephone  
☎ 020-7828 4925 for our offer



### 0% OR LOW INTEREST FINANCE

No deposit Required  
☎ 020-7828 4925  
For full details



#### NIKON DIGITAL CAMERAS

Nikon D5 DSLR body.....	£5,199.00
Nikon D810A (Astrophotography) DSLR body.....	£2,999.00
Nikon D810 DSLR body.....	£2,139.00
Nikon D810 + MB-D12 Grip Kit.....	£2,435.00
Nikon D810 + AF-S 14-24mm f/2.8G ED Nikkor.....	£3,680.00
Nikon D810 + AF-S 24-70mm f/2.8G ED Nikkor.....	£3,560.00
Nikon D810 + AF-S 14-24mm f/2.8G & AF-S 24-70mm f/2.8G ED Nikkor Kit.....	£5,099.00
Nikon MB-D12 Grip for D810.....	£299.00
Nikon D750 DSLR body.....	£1,585.00
Nikon D750 + MB-D16 grip Kit.....	£1,825.00
Nikon D750 + AF-S 24-85mm f/3.5-4.5G ED VR Kit.....	£1,999.00
Nikon D750 + AF-S 24-120mm f/4G ED VR Kit.....	£2,225.00
Nikon D610 DSLR body.....	£1,145.00
Nikon D610 + MB-D14 Grip Kit.....	£1,349.00
Nikon D610 + AF-S 24-85mm f/3.5-4.5G ED VR Nikkor MB-D14 Grip for D610.....	£1,549.00
Nikon D500 DSLR body.....	£209.00
Nikon D500 + 16-80mm f/2.8-4E ED.....	£1,720.00
Nikon MB-D17 grip for D500.....	£2,470.00
Nikon D7200 DSLR body.....	£349.00
Nikon D7200 + 18-105mm f/3.5-5.6G VR DX IF-ED Kit.....	£829.00
Nikon D7200 + MB-D15 Grip Kit.....	£999.00
Nikon D7100 DSLR body.....	£1,045.00
Nikon D7100 + MB-D15 Grip Kit.....	£659.00
Nikon D7100 + 18-105mm f/3.5-5.6G VR DX IF-ED Kit.....	£869.00
Nikon D7100 + 18-140mm f/3.5-5.6G VR DX ED Kit.....	£849.00
Nikon D5500 body only.....	£1,095.00
Nikon D5500 body + AF-P 18-55mm f/3.5-5.6G VR DX Kit.....	£549.00
Nikon D5500 AF-S 18-140mm f/3.5-5.6G VR DX Kit.....	£619.00
Nikon D5300 DSLR body.....	£799.00
Nikon D5300 + AF-P 18-55mm f/3.5-5.6G VR DX Kit.....	£419.00
Nikon D5300 + AF-S 18-140mm f/3.5-5.6G VR DX Kit.....	£495.00
Nikon D5200 DSLR body.....	£665.00
Nikon D5200 + AF-S 18-55mm f/3.5-5.6G VR II IF-ED.....	£299.00
Nikon D5400 DSLR body.....	£369.00
Nikon D3400 + AF-P 18-55mm f/3.5-5.6G VR DX Kit.....	£399.00
Nikon D3300 DSLR body.....	£489.00
Nikon D3300 + AF-P 18-55mm f/3.5-5.6G VR DX Kit.....	£269.00
Nikon Df + AF-S 50mm f/1.8G Special Edition.....	£349.00
Nikon Df DSLR body, chrome or black finish.....	£2,195.00
Nikon Df + AF-S 50mm f/1.8G SPECIAL GOLD Edition.....	£1,995.00
	£5,000.00

#### NIKON 1 SYSTEM

Nikon 1 V3 10-30mm + Grip Kit.....	£795.00
Nikon 1 AW1 + 11-27.5mm f/3.5-5.6.....	£549.00
Nikon 1 AW1 + 11-27.5mm f/3.5-5.6 + 10mm f/2.8.....	£695.00
Nikon 1 J5 + 10-30mm PD Zoom lens, black.....	£345.00
Nikkor VR 6.7-13mm f/3.5-5.6.....	£375.00
Nikkor VR 11-27.5mm f/3.5-5.6.....	£149.00
Nikkor VR 10-30mm f/3.5-5.6.....	£225.00
Nikkor VR 30-110mm f/3.8-5.6.....	£179.00
1 Nikkor VR 70-300mm f/4.5-5.6.....	£745.00
1 Nikkor AW 10mm f/2.8.....	£245.00
1 Nikkor 10mm f/2.8.....	£179.00
1 Nikkor 18.5mm f/1.8.....	£145.00
1 Nikkor 32mm f/1.2.....	£599.00
1 Nikkor VR 10-100mm f/4.5-5.6 PD-Zoom.....	£529.00
Nikon SB-N7 Speedlight.....	£119.00
Nikon GP-N100 GPS Unit.....	£99.00
Mount adapter FT1.....	£199.00

#### NIKON COOLPIX

Nikon Coolpix A.....	£849.00
----------------------	---------

#### AF-S & AF DX NIKKOR LENSES

10.5mm f/2.8G AF DX ED Fisheye.....	£559.00
AF-S 35mm f/1.8G DX.....	£165.00
AF-S 10-24mm f/3.5-4.5G IF-ED DX.....	£689.00
AF-S 12-24mm f/4G IF-ED DX.....	£939.00
AF-S 16-80mm f/2.8-4E ED VR DX.....	£849.00
AF-S 16-85mm f/3.5-5.6G ED VR DX.....	£525.00
AF-S 17-55mm f/2.8G DX IF-ED.....	£1,225.00
AF-P 18-55mm f/3.5-5.6G VR DX.....	£199.00
AF-P 18-55mm f/3.5-5.6G DX.....	£149.00
AF-S 18-55mm f/3.5-5.6G VR II ED DX.....	£149.00
AF-S 18-105mm f/3.5-5.6G VR DX IF-ED.....	£225.00
AF-S 18-140mm f/3.5-5.6G VR DX ED.....	£445.00
AF-S 18-200mm f/3.5-5.6G VR II DX IF-ED.....	£595.00
AF-S 18-300mm f/3.5-5.6G VR DX.....	£795.00
AF-S 18-300mm f/3.5-6.3G ED VR DX.....	£575.00
AF-S 55-200mm f/4.5-5.6G DX ED VR II.....	£229.00
AF-S 55-300mm f/4.5-5.6G DX VR.....	£289.00
AF-P 70-300mm f/4.5-6.3G ED VR DX.....	£349.00
AF-P 70-300mm f/4.5-6.3G ED.....	£299.00

#### AF FX NIKKOR LENSES

14mm f/2.8D AF ED.....	£1,299.00
16mm f/2.8D AF Fisheye.....	£665.00
20mm f/2.8D AF.....	£495.00
24mm f/2.8D AF.....	£375.00
28mm f/2.8D AF.....	£249.00
35mm f/2D AF.....	£269.00
50mm f/1.8D AF.....	£109.00
50mm f/1.4D AF.....	£249.00
105mm f/2D AF-DC.....	£849.00
135mm f/2D AF-DC.....	£1,075.00
180mm f2.8D AF IF-ED.....	£699.00

#### AF-S FX SILENT WAVE NIKKOR LENSES

AF-S 20mm f/1.8G ED.....	£609.00
AF-S 24mm f/1.8G.....	£635.00
AF-S 24mm f/1.4G ED.....	£1,675.00
AF-S 28mm f/1.8G.....	£525.00
AF-S 35mm f/1.4G.....	£1,459.00
AF-S 35mm f/1.8G ED.....	£419.00
AF-S 50mm f/1.4G IF.....	£365.00
AF-S 50mm f/1.8G IF.....	£179.00
AF-S 58mm f/1.4G.....	£1,345.00
AF-S 85mm f/1.8G.....	£415.00
AF-S 85mm f/1.4G.....	£1,289.00
AF-S 105mm f/1.4E ED.....	£2,049.00
AF-S 14-24mm f/2.8G IF-ED.....	£1,545.00
AF-S 16-35mm f/4G ED VR.....	£979.00
AF-S 17-35mm f/2.8D IF-ED.....	£1,445.00
AF-S 18-35mm f/3.5-4.5G.....	£585.00
AF-S 24-70mm f/2.8G IF-ED.....	£1,425.00
AF-S 24-70mm f/2.8E ED VR.....	£1,845.00
AF-S 24-85mm f/3.5-4.5G ED VR.....	£409.00
AF-S 24-120mm f/4G ED VR II.....	£895.00
AF-S 28-300mm f/3.5-5.6G ED VR.....	£759.00
AF-S 70-200mm f/2.8G VR II IF-ED.....	£1,869.00
AF-S 70-200mm f/4G VR IF-ED.....	£1,119.00
AF-S 70-300mm f/4.5-5.6G VR IF-ED.....	£469.00
AF-S 80-400mm f/4.5-5.6G VR II ED.....	£1,999.00
AF-S 200-400mm f/4G VR II IF-ED.....	£5,795.00
AF-S 200-500mm f/5.6E VR ED.....	£1,179.00
AF-S 200mm f/2G VR II IF-ED.....	£4,495.00
AF-S 300mm f/4E PF ED VR.....	£1,425.00
AF-S 300mm f/2.8G VR II IF-ED.....	£4,499.00
AF-S 400mm f/2.8E VR FL ED.....	£9,450.00
AF-S 500mm f/4E FL ED VR.....	£8,149.00
AF-S 600mm f/4E FL ED VR.....	£9,490.00
AF-S 800mm f/5.6E VR FL ED (inc. TC-800-1.25E ED teleconverter).....	£13,995.00
TC-14E III 1.4x teleconverter.....	£419.00
TC-17E II 1.7x teleconverter.....	£345.00
TC-20E III 2x teleconverter.....	£375.00

#### AF & AF-S MICRO-NIKKOR LENSES

AF-S 40mm f/2.8G DX Micro.....	£225.00
60mm f/2.8D Micro.....	£399.00
AF-S 60mm f/2.8G ED Micro.....	£469.00
AF-S 85mm f/3.5G VR DX IF-ED Micro.....	£415.00
AF-S 105mm f/2.8G AF-S VR Micro IF-ED.....	£699.00
200mm f/4D AF Micro IF-ED.....	£1,295.00

#### NIKON SPEEDLIGHTS

SB-5000 Speedlight.....	£475.00
SB-700 Speedlight.....	£239.00
SB-500 Speedlight.....	£179.00
SB-300 Speedlight.....	£99.00
SB-R1C1 Close-Up Commander Kit.....	£559.00
SB-R1 Close-Up Remote Kit.....	£419.00
SU-800 Wireless Speedlight Commander.....	£265.00
SB-R200 Wireless Remote Speedlight.....	£149.00

#### MANUAL FOCUS NIKKOR AIS LENSES

20mm f/2.8 Nikkor.....	£901.00
24mm f/2.8 Nikkor.....	£608.00
28mm f/2.8 Nikkor.....	£615.00
35mm f/1.4 Nikkor.....	£1,227.00
45mm f/2.8P Nikkor, chrome.....	£325.00
50mm f/1.4 Nikkor.....	£597.00
50mm f/1.2 Nikkor.....	£855.00

#### SPECIAL PURPOSE: PERSPECTIVE CONTROL & MICRO-NIKKOR LENSES

24mm f/3.5D PC-E ED Nikkor.....	£1,499.00
28mm f/3.5 PC Nikkor.....	£1,195.00
45mm f/2.8D ED PC-E Nikkor.....	£1,399.00
85mm f/2.8D ED PC-E Nikkor.....	£1,290.00
105mm f/2.8 Micro-Nikkor.....	£1,047.00
200mm f/4 Micro-Nikkor.....	£895.00

PC: Perspective Control. PC-E: Tilt/Shift-Perspective Control

Prices include 20% VAT. Prices Subject to Change. E.&O.E.

TO ORDER TELEPHONE 020-7828 4925





PROBABLY THE WIDEST RANGE  
OF NEW & SECOND-HAND  
**Nikon** IN THE WORLD

☎ 020-7828 4925

EST. 1985 – THE KIND OF SERVICE OF WHICH LEGENDS ARE MADE



## THE NEW **Nikon D5** ... JOIN THE DARK SIDE

- New 20.8mp FX format sensor.
- 153 Autofocus point system with 99 cross-type AF sensors.
- Up to 12 frames per second in Continuous High speed shooting mode, or 14fps with the mirror up.
- 200 NEF (RAW) file capacity buffer allowing for never before possible continuous shooting capabilities.
- A standard ISO range of 100 to 102,400, extendable up to 3280000 ISO equivalent.
- Thanks to a brand new EXPEED 5 processor one can shoot at these high ISOs with low noise.
- A new 8.0 cm (3.2 in.), 2360k-dot LCD monitor, which offers touch operation in review mode.
- 4K/UHD high definition D-Movies (3840x2160 pixels) can be recorded at 30p/25p/24p as well as 50p and 60p in (full HD) 1080p, and the camera offers clean HDMI output in all qualities.
- Available as a XQD version with two XQD card slots to handle the camera's 200 RAW file frame bursts, but also available as a CF card version for those who require it.
- New WT-6 for even faster wireless transfer speeds over a distance of up to 200m.

Nikon D5 DSLR body £5199.00 inc. VAT



**ORDER YOUR D5 TODAY**  
**020-7828 4925**



Find us on Facebook: [www.facebook.com/graysofwestminster](http://www.facebook.com/graysofwestminster)

Visit our website: [www.graysofwestminster.co.uk](http://www.graysofwestminster.co.uk)



In association with

**SIGMA**

**APOY 2016** Amateur Photographer OF THE YEAR COMPETITION

**A SMALL PLOT OF LAND**

Here we have the top 30 images for round 6 of APOY 2016 – A Small Plot of Land (Landscapes and Cityscapes)

Landscapes and cityscapes are wonderful genres for any photographer to explore. Both types of photography, somewhat interchangeable with regard to technique, require the application of the most well-known and fundamental rules of photography. Both are made or unmade by the light, and both can benefit from accessories such as filters. Landscape and cityscape photography require photographers to learn to break down the scene and mentally reduce it to its most essential components in order to make sense of chaos.

In this round, we asked you to send us your best images of landscapes and cityscapes, and once again, the images we received were of an overwhelming quality. The winner of round 6 (Landscapes and Cityscapes) is Adam Stephenson from Halesowen in the West Midlands. He receives a Sigma dpO Quattro camera and Sigma LVF-01 LCD Viewfinder.

The SIGMA dpO Quattro is the

fourth dp camera in the Quattro series and incorporates a high-performance 14mm f/4 lens (equivalent to a 21mm lens on a 35mm SLR). The lens of the dpO achieves the highest optical performance, and features four FLD ('F' low dispersion) glass elements, which have performance equal to fluorite; two SLD (special low dispersion) glass elements; and two aspheric lenses, including a wide double-sided aspheric lens. This reduces chromatic aberration and distortion, which are characteristics that are often present in super-wideangle photography. Perfectly suited to landscape photographers, the addition of the Sigma LVF-01 LCD Viewfinder cuts off outside light and magnifies the LCD display 2.5x, allowing photographers to check focusing and composition more easily – a crucial application when shooting subjects such as landscapes and cityscapes. All in all, Adam takes home a prize value worth £999.99.



1st

**1 Adam Stephenson**  
West Midlands 50pts  
Nikon D750, 14mm, 25secs at f/2.8, ISO 2,500

In first place for this round we find a common trope in landscape photography – the lone tree. But what marks this image out is its immense scale. Behind the tree we have the glowing lights of Hereford; in the foreground is the grass; and above it all is the sweeping arch of the Milky Way. It's such an impressive image!



**2 Stian Nesoy Norway 49pts**  
Canon EOS 5D Mark III, 16mm, 20secs at f/4, ISO 400-1,600  
These unique ice-crystal formations were captured on a frozen river by the high mountains of Norway's west, Stian tells us. The image was shot in the narrow window of time between the river freezing over, but before snow blanketed the landscape. The image looks almost alien and shows us why the landscapes of Scandinavia are so appealing to photographers.

2nd



**The 2016 leaderboard**

Penny Halsall is in first place with a very impressive 182 points, while 50 points behind her in second place is Dominic Beaven with 132 points. In third we find George Digalakis with 130 points. In fourth place is Bertrand Chombart, and in fifth is Adam Stephenson.

1 Penny Halsall	182pts	6 Sigita Playdon	119pts
2 Dominic Beaven	132pts	7 Adrian Mills	117pts
3 George Digalakis	130pts	8 Russ Barnes	116pts
4 Bertrand Chombart	129pts	9 Fearghal Breathnach	103pts
5 Adam Stephenson	125pts	10 David Fletcher	94pts





3rd

### 3 Denis Dowland London 48pts

Canon EOS 700D, 18-135mm,  
1/1,000sec at f/11, ISO 800

In third place we have a city shot, and it's a rather unconventional one. Here we see a view of Canary Wharf taken from a building site across the river. Usually, city shots focus squarely on the jutting graphic forms of the buildings, but here Denis has offered a unique perspective by using a building site as his foreground. The smooth mountains of grit and sand will eventually play their part in forming hard-edged buildings. The relentless expansion of the cityscape continues. It just goes to show that there's a fresh angle to any subject.



**4 Daniel Llamas Spain 47pts**

Nikon D610, 14-24mm, 30secs at f/2.8, ISO 6,400

New and old – we see the glow of Galicia's light pollution and the ancient spread of starlight.

**5 Daniel Lois Otero Spain 46pts**

Nikon D610, 14-24mm, 30secs at f/2.8, ISO 3,200

This image was a stitched panorama of 10 frames and took two years to master.

**6 Dominic Beaven London 45pts**

Canon 5D Mark III, 17-40mm, 69secs at f/13, ISO 50

This image was taken using a 10-stop Zomei ND filter to increase the exposure time and achieve the charcoal smear of sky.

**7 Alan Warriner Newcastle 44pts**

Canon EOS 350D, 10-22mm, 20secs at f/11, ISO 100

This is Bassenthwaite in the Lake District in all its winter beauty. Great use of strong colour within an otherwise monochrome landscape.

**8 David Hendry Glasgow 43pts**

Sony Alpha 65, 10-20mm, 6secs at f/7.1, ISO 100, polariser

David took this extraordinarily beautiful shot in Finnick Glen. The polariser has been vital here in order to remove the reflections from the water and reveal the textured floor of the river.

**9 Keith Trueman Devon 42pts**

Canon EOS 7D, 10-22mm, 0.3sec at f/11, ISO 100

'This was a tricky shot to get as you need a spring low tide that coincides with the setting sun,' says Keith, of this shot of Northam Sands.

**10 Grant Hyatt Neath Port Talbot 41pts**

Nikon D610, 24-70mm, 20secs at f/20, ISO 100

By using a slow shutter, Grant has rendered the moving clouds to look almost like a waterfall.

**11 Chris Gebauer Australia 40pts**

Fujifilm X-Pro1, 16-50mm, 20secs at f/22, ISO 200

Chris found this coastal scene in Sugarloaf Rock at Cape Naturaliste, Western Australia.

**12 Abhijit Chatterjee India 39pts**

Nikon D7100, 11-16mm, 1/500sec at f/10, ISO 250

Abhijit has created a brilliant abstract scene by simply using reflections in a puddle.

**13 Gavin Duncan Falkirk 38pts**

Nikon D800, 24-70mm, 1/60sec at f/9, ISO 100

This is a two-shot panorama of the Quiraing on the Isle of Skye.

**14 Iain Turnbull Highland 37pts**

Canon EOS 5D, 28-300mm, 1/60sec at f/11, ISO 100

This is an example of how to use negative space! Titled 'The Storr in Low Cloud', it was taken in the Isle of Skye in April 2015.

**15 June Morrissey Berkshire 36pts**

Canon EOS 5D, 24-105mm, 1/200sec at f/8, ISO 200

The toning has given June's image an almost nocturnal and cinematic atmosphere.

**16 Bertrand Chombart France 35pts**

Nikon D800E, 24mm, 120sec at f/8, ISO 100

Paris's Place Vendôme gets a monochrome makeover in Bertrand's image.

**17 Valentyn Odnoviun Lithuania 34pts**

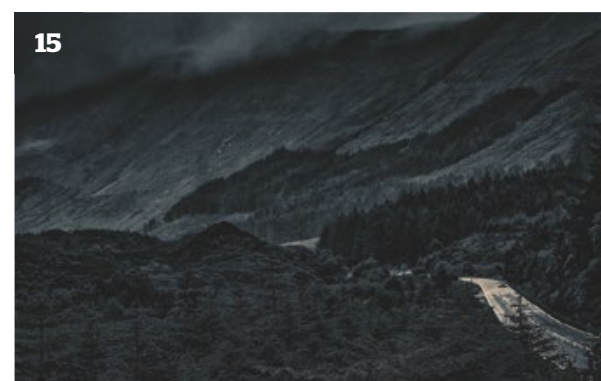
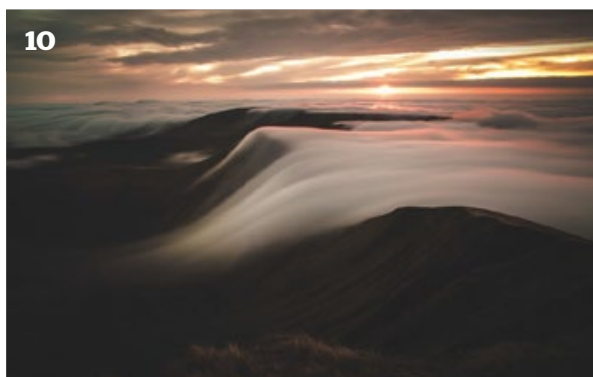
Nikon D700, 50mm, 1/250sec at f/14, ISO 200

A minimalist look at landscapes here; it's a superb example of natural visual balance.

**18 David Ball Nottingham 33pts**

Canon EOS 6D, 17-40mm, 1/200sec at f/11, ISO 200

Again we see how space can be used excellently. The glow of the rising sun throws a beautiful cast upon the scene.





5



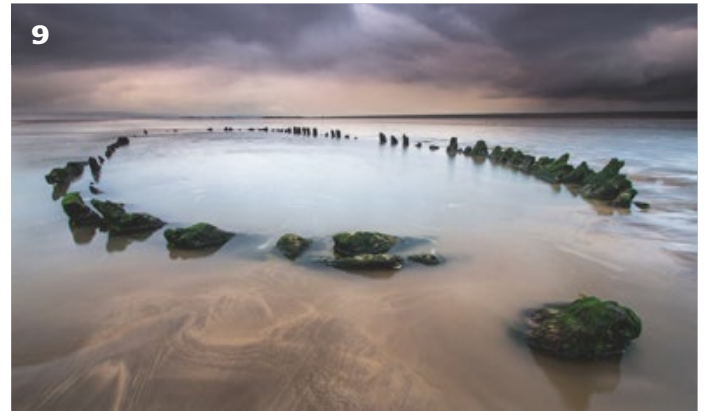
7



8



9



12



13



18





**19 Jacinta O'Shea Bristol 32pts**

iPhone 6, 4.15mm, 1/6,400sec at f/2.2, ISO 32

It's amazing to realise that this image of Aiguille du Midi, Mont Blanc, in the French Alps was taken on an everyday smartphone. It really goes to show that not every epic shot of landscapes has to be taken with a top-of-the-range DSLR.

**20 Dominic Burdon Oxfordshire 31pts**

Nikon D800, 200mm, 1/500sec at f/8, ISO 250

Dominic's image of Washington State in the USA proves how the right light (observed from the right vantage point) can bring any landscape to life. The sun has also done great work of revealing the mesmerising patterns of the landscape.

**21 George Digalakis Greece 30pts**

Nikon D7000, 27-200mm, 1/250sec at f/9, ISO 100

Here we see a part of Stonehenge not often seen – the simple fields that surround it. There's something to be said for turning a few degrees and seeing the areas that surround often-photographed landmarks.

**22 Elena Kurlaviciute Cheshire 29pts**

Nikon Coolpix L5, 20.2mm, 1/610sec at f/4.3, ISO 79

The powerful forms of the mountains are incredibly graphic and impressive. It's a scene that almost requires a kind of humble silence.

**23 Penny Halsall Oxfordshire 28pts**

Sony Cyber-shot DSC-RX100, 10-40mm, 1/200sec at f/11, ISO 125

'On the way to Lambourn, the landscape as you climb up the Ridgeway opens up and becomes rather atmospheric,' says Penny.

**24 Peter Henry Cumbria 27pts**

Nikon D600, 105mm, 1/320sec at f/8, ISO 200

This image taken in Ullswater looking towards Patterdale is all about visual layers. Look at how each section is stacked.

**25 Felix Belloin London 26pts**

Canon EOS 5DS R, 70-200mm, 1/50sec at f/8, ISO 100

Felix took this picture at Ben Nevis at 6.15am. He has used the light almost like a spotlight to reveal just a small section.

**26 Fearghal Breathnach Ireland 25pts**

Canon EOS 5D Mark III, 16-35mm, 120secs at f/16, ISO 50

This image titled 'This Green & Pleasant Land' is a blend of three exposures: one with a Little Stopper and two without.

**27 Anita Nicholson Northumberland 24pts**

Canon EOS 5D Mark II, 17-40mm, 1/4sec at f/9, ISO 50

This is an image of the Pap of Glencoe on the shores of Loch Leven, and the rust-coloured seaweed adds a nice element of foreground interest.

**28 Dylan Nardini South Lanarkshire 23pts**

Nikon D810, 70-200mm, 1/40sec at f/8, ISO 100

The crooked leading line is nice enough, but the sheep are a massive bonus to the image.

**29 Stu Meech Warwickshire 22pts**

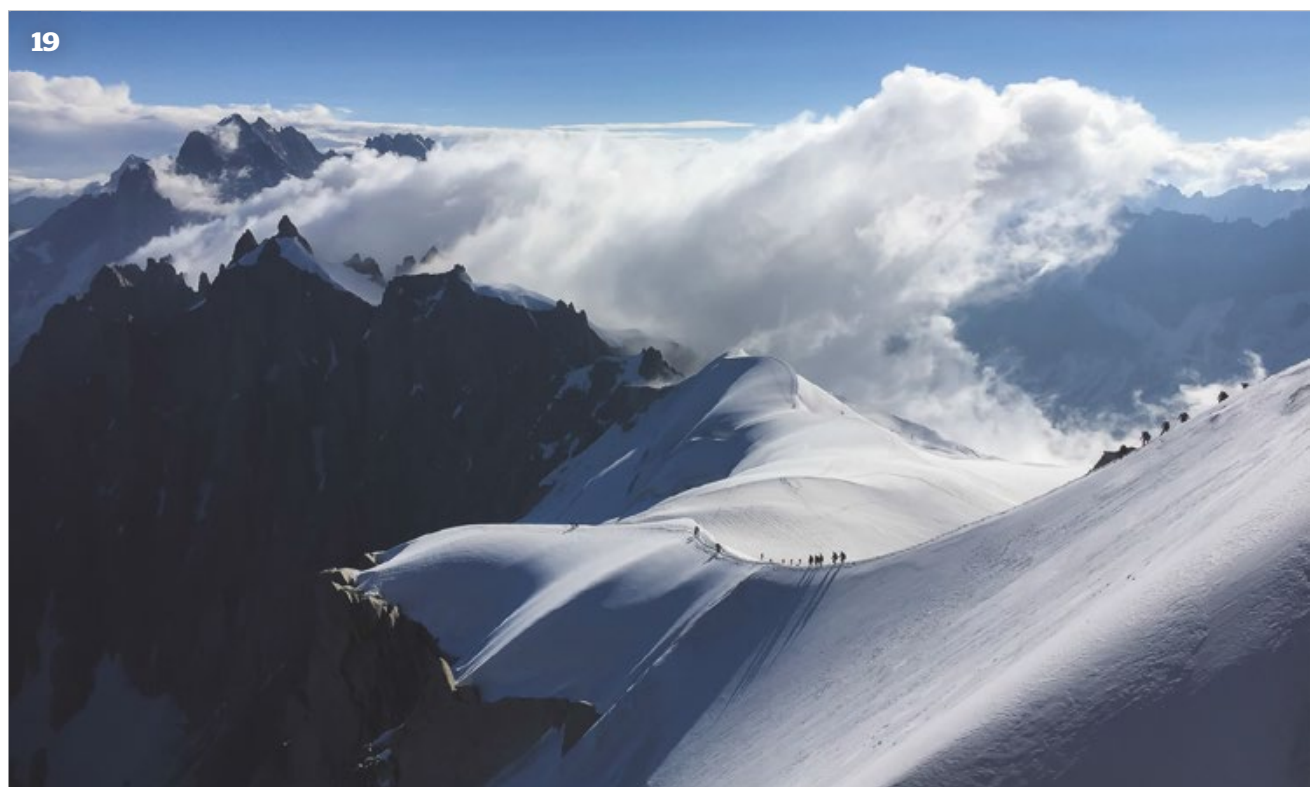
Nikon D750, 16-35mm, 1/60sec at f/10, ISO 100

What a great image! After a brief rain shower, a rainbow forms over a field of poppies.

**30 Martin Watt Fife 21pts**

Canon EOS 5D Mark III, 16-35mm, 1.3secs at f/13, ISO 200

This is Sango Beach at Durness in the Scottish Highlands. You can almost smell the sea air and hear the rush of waves.



**'It's amazing to realise that this image (above) of Aiguille du Midi, Mont Blanc, in the French Alps was taken on an everyday smartphone'**





20



21



22



25



30





# Don't miss...

# Digital Splash 16

## 15 & 16 October 2016

### At Exhibition Centre, Liverpool L3 4BX

DIGITAL SPLASH – the north of England's biggest photography and optics show – is back once again! Digital Splash 16 is the place to be for all photographers, from enthusiasts to professionals, to get hands-on with the latest equipment, seek expert advice, get inspired by talks and get involved in great workshops – not to mention grabbing special show offers. Some of the biggest names in

photography will be giving talks about their latest work, how they get their shots and their passion for photography, so you can learn from some of the best in the business.

You can get involved before the show with the Digital Splash Awards photo competition, where you could win a share of £1,700 and have your image exhibited at the show.

Entry to Digital Splash 16 is £5 per person

on the day, but it's FREE if you register in advance. Registering also gets you a unique discount code for 25% off talks and workshops when booked in advance. Registration for free entry closes on Friday, 7 October, so don't delay! Visit [www.digitalsplash.tv](http://www.digitalsplash.tv) for more details or call 01772 252188.

Make sure you come and visit Amateur Photographer, where we will have an exclusive subs offer and a fantastic Fujifilm X-T10 to be won.



**Visit the show** Digital Splash Photography Show will be held on 15 & 16 October 2016 at Exhibition Centre Liverpool, King's Dock, Liverpool Waterfront, Merseyside. Opening times: 10–6pm daily. To enter the competition, register for tickets and find out more about the show, visit [www.digitalsplash.tv](http://www.digitalsplash.tv). Tel: **01772 252188**.

# Talks and workshops

## Ross Grieve



Award-winning New Zealand photographer Ross Grieve has spent 20 years developing his love for photography. From Sweden to Sydney, Ross has been working for clients such as Waldorf Astoria, RSA and Panasonic. A pioneer of 4K photography, Ross works both outdoors and from his studio in Pembrokeshire.

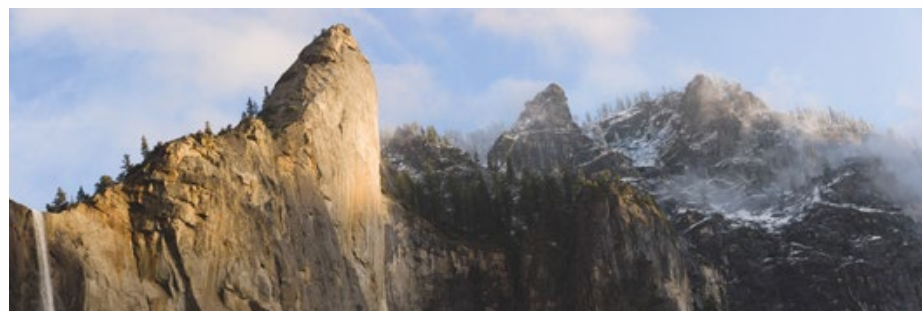
### Ross Grieve Seminar 1 The Power of 4K Photography

Saturday 15 October, Focal Point Theatre, 12pm  
As a 4K photography pioneer working with the technique for more than two years, Ross takes guests through how to shoot 4K across all aspects of photography – sports, commercial, food and studio. Find out how and why he uses 4K for his professional work.

### Ross Grieve Seminar 2 Silent Street Photography

Saturday 15 October, Focal Point Theatre, 3pm  
Everyone loves people watching, so it's no surprise that street photography has been growing in popularity all around the world – it's accessible to everyone and a great way to improve one's photography skills. Ross teaches the techniques to improve street photography, including how to use 4K to get the most out of your shots.

© ROSS GRIEVE



© MICHAEL FREEMAN

## Michael Freeman



Michael Freeman is an award-winning editorial photographer. Author of best-selling photography book *The Photographer's Eye*, which has sold over a million copies, Michael has spent much of his working life focused on Asia, from Thailand to Japan and China.

### Michael Freeman Seminar 1 The Photographer's Eye on Travel

Sunday 16 October, Aperture Theatre, 12.30pm  
Now that everyone travels (or feels that they can) and everyone shoots, how do you stand out from the ocean of imagery? Michael explains how.

### Michael Freeman Seminar 2 10 Ways to Make Your Photography More Creative

Sunday 16 October, Aperture Theatre, 3.30pm  
Michael provides ten generally unexpected paths that you might not have considered to get your photography onto a meaningful creative track that will also help you develop a personal style of shooting.



## Faye and Trevor Yerbury



Faye and Trevor Yerbury are an award-winning team of portrait and fine-art nude

photographers. They have exhibited around the world and have had their work featured in many magazines and books.

## Faye and Trevor Yerbury Seminar 1 The Fine Art Nude

Sunday 16 October, Aperture Theatre, 11am  
With more than 30 years' experience, Faye and Trevor discuss their development, changing style and approach – as well as how to market and sell one's work through the internet and physical galleries.

## Faye and Trevor Yerbury Seminar 2 Portraits & Projects

Sunday 16 October, Aperture Theatre, 2pm  
Faye and Trevor look at the importance of visual self-development by setting yourself a major project each year. The resulting work can have a direct influence of your portraiture both in the studio and on location.

## Kate Hopewell-Smith



Featured many times in *Amateur Photographer*, Kate Hopewell-Smith is a woman of many talents. A photographer, trainer and Nikon Ambassador, Kate is one of the most respected photographers in the industry. She runs a six-month mentoring scheme and group training seminars.

## Kate Hopewell-Smith Seminar 1 Kate Hopewell-Smith on Weddings

Saturday 15 October, Aperture Theatre, 12.30pm  
Kate discusses how she works with natural light on location, when to add on-camera flash to improve poor light and the lighting techniques she uses when she has to fully light a wedding couple on their big day.

## Kate Hopewell-Smith Seminar 2 Kate Hopewell-Smith on Portraits

Saturday 15 October, Aperture Theatre, 3.30pm  
In this talk, Kate shares five things that she says will help you create location portraits with impact. Find out how light, location, composition, posing and expression will help deliver consistently strong location portraits.

## Jonathan Chritchley



One of the world's foremost fine-art photographers, Jonathan Chritchley's ocean-based mono work can be found in magazines and galleries around the world. He has worked for brands such as Ralph Lauren, Hilton International and British Airways. Jonathan was named one of the top 100 photographers of all time by *The Sunday Times*.

## Jonathan Chritchley Seminar 1 Forging Silver

Sunday 16 October, Focal Point Theatre, 10.30am  
Jonathan runs through his journey to becoming one of the world's most well-received photographers – from first influences to his first book.

## Jonathan Chritchley Seminar 2 Every Cloud...

Sunday 16 October, Focal Point Theatre, 1.30pm  
Following on from Forging Silver (see above), the second talk by ocean photographer Jonathan focuses on his work in 2015, when he visited four continents in six months and worked with three of his photographic heroes, and goes on to reveal some exciting future projects.

## Ann and Steve Toon



Ann and Steve have written several books, and lead workshops both in the UK and on safari in Africa. When not on reserve in Africa, Ann and Steve can be found roaming the wilds of Northumberland National Park.

## Ann and Steve Toon Seminar 1 Add Wow Factor to Your Wildlife Images

Saturday 15 October, Aperture Theatre, 11am  
There are few shortcuts to capturing consistently great wildlife images – it takes preparation, patience and perspiration – but there are ways to add that winning bit of magic to your work. Ann and Steve reveal their tried-and-tested tips and techniques for success.

## Ann and Steve Toon Seminar 2 Eyes on the Wild

Saturday 15 October, Aperture Theatre, 2pm  
Ann and Steve explain their mission to celebrate the beauty of the natural world through their cameras, and communicate its untold stories, which has taken them to some of the world's photographic hotspots.

## Tim Wallace



Commercial advertising and car photographer Tim Wallace works with clients across the world, such as Jaguar Land Rover, Mercedes and Peugeot. His strong style of working and creative approach inspires not only his clients but also their customers – something that was recently acknowledged when he won International Commercial Advertising Photographer of the Year and Car Photographer of the Year.

## Tim Wallace Seminar 1 Inspired Business

Saturday 15 October, Focal Point Theatre, 10.30am  
Tim looks at the kind of work he built his business model on and then takes you through the processes of building up a photography business. He also looks at positioning yourself within your chosen industry. Visitors will learn to think laterally about their brand and direction, style of work and industry sector – and how to adapt your approach, depending on the client.

## Tim Wallace Seminar 2 Building a Commercial Portfolio

Saturday 15 October, Focal Point Theatre, 1.30pm  
Tim will be going through the lessons he has learned over the past ten years and also answering questions such as 'Why should we only have one portfolio?' He will demonstrate how he uses his own work effectively, and passes on some hints and tips on how to get your portfolio working for you.

## Steve Bloom



Steve Bloom is a writer and photographic artist who specialises in evocative images of the living world. Born in South Africa, Steve first used a camera to document life in South Africa during the apartheid years. When he moved to England he co-founded one of London's leading photographic special effects companies. He has won international awards for his work, as well as being published in numerous publications.



## Steve Bloom Seminar 1 Living Africa

Sunday 16 October, Focal Point Theatre, 12pm and 3pm (same talk)  
Join best-selling author and photographer Steve as he journeys through the essence and diversity of Africa. Hear the stories behind the creation of his books *Living Africa*, *Elephant!* and *Trading Places: The Merchants of Nairobi*. Steve shares with the audience this extraordinary continent: from the desert landscapes and dynamic wildlife to remote village life.



# TAMRON

*Super Autumn*

# £50

*Cashback*



*Get £50 Cashback on these Tamron Super Performance Lenses...*



For terms & conditions, more details and claim back form visit

**[www.tamron.co.uk](http://www.tamron.co.uk)**

**Offer valid from 15th September 2016 - 15th November 2016**

Last claim date 15th December 2016. Offer only valid from official UK Tamron participating stockists. See website for details.

**5 YEAR  
WARRANTY**

# TAMRON

 **TamronUK**



# Making magic manually

Despite autofocus technologies, manual focus remains an important feature in photography.

**Matt Golowczynski** looks at how best to use this tool

**N**owadays, it seems like almost every new camera arrives with the promise of the world's fastest autofocus for its class, which is understandable given how critical this feature is to a camera's overall performance. Yet manufacturers haven't overlooked the development of manual-focusing systems, with the feature

gaining prominence across enthusiast and professional models.

Manual focus can be used to circumvent the weaknesses of modern autofocus systems or issues when using even advanced systems in particular conditions, such as bright sunlight, poorly lit scenes or when capturing subjects that contain fine, repetitive detail – or not enough of it.



There are many more reasons why it continues to be used today. The success of compact system (mirrorless) camera lines, for example, and the availability of various adapters have sparked a resurgence in the popularity of older optics that lack their own focusing motors. Moreover, with high-quality video recording now a prominent feature in many cameras, manual focus is needed for complete control in situations where it is not desirable to place one's faith entirely in one autofocus system or when using lenses developed for one system on another.

Despite its usefulness, there are a number of reasons why using manual focus may fail to produce the desired result – from differences in manufacturing tolerances and maladjustment of parts to the use of inappropriate technique. The following pages examine various techniques that will help you achieve best focus when working manually. ➤



➤ **Manual focusing with DSLRs**  
Manual focus is performed on DSLRs in much the same way as it was on film bodies – through a simple rotation of a lens's focusing ring. Today this can be controlled with far greater accuracy than before, although the design of today's DSLRs presents a few problems. One of these involves the standard focusing screens used in DSLRs and the effect they have on the viewfinder. As it's assumed that autofocus will be used in the majority of situations, DSLRs come with a plain focusing screen that's optimised to keep the viewfinder image bright even with slower lenses, while channelling enough light to the AF sensor to perform autofocus.

Thus, DSLRs cannot display an image through the viewfinder that shows the true depth of field at particularly wide apertures, and will instead display a depth of field at a slightly smaller one, such as  $f/2.8$  – even when you're using a lens with a wider maximum aperture. Not being able to exactly assess depth of field at wide apertures obviously affects your ability to accurately focus. Such assessment is difficult enough because of the potential for very shallow depth of field at wide apertures. One way around this is to replace the default focusing screen with an alternative, such as a screen designed with a split-screen indicator and micoprism. This will provide you with an accurate idea of depth of field at such apertures to help you manually focus with accuracy, although the penalty will be decreased brightness in the viewfinder.

### Other potential complications

Modern cameras typically focus using a lens's widest aperture, only stopping down to the selected aperture before the image is taken. This creates two issues. First, even when using smaller apertures, the image

you see through the viewfinder does not display the depth of field that will result in the final image. You can engage your camera's depth-of-field preview function as you focus, although your viewfinder will darken with smaller apertures.

Then, spherical aberration, which can be problematic in wide-aperture lenses, can result in the best point of focus moving slightly between apertures. Here, the main concerns are the difference between where the image is formed at the aperture used for focusing and the aperture used to capture the image, assuming it is smaller. Too great a shift between these can mean the focus isn't in the optimum position at the time of capture.

Other issues mostly stem from differences in the performance of individual components (the lens, focusing screen, viewfinder, mirror, and so on), as well as any issues from using these in combination with one another. Your camera's focusing screen or mirror could be misaligned, for example, or damaged. Or your viewfinder's dioptre may not be set at the best point for your eyesight.

All of the above should make the advantages of focusing using live view obvious. By removing the viewfinder, focusing screen and mirror from the equation, any room for error is lessened, while the ability to view the scene at a larger size and with greater brightness and clarity than the viewfinder gives you a better idea of where you are focusing.

In live view, focusing uses the actual image projected onto the sensor by the lens, making it inherently more accurate than the phase-detect AF systems on DSLRs. It may also provide you with the option of magnifying into the scene for clarity. DSLRs are also beginning to offer focus-peaking options, although this does not feature as widely as on mirrorless models (explained on page 40).

## Using live-view focusing to get manual focus right every time

### 1 Set up your camera correctly

EVEN before you activate your camera's live-view function, it's worth thinking about how you will trigger the shot you wish to take, so that you can inculcate a few best practices first. For instance, you are likely to be using your camera when mounted on a tripod, in which case you should disable your camera's (or lens's) image-stabilisation system. The image-stabilisation system can create a cycle of vibrations and vibration correction that can compromise the image's sharpness. You may not need to do this if you know for certain that the camera or lens has an effective means of automatically detecting that it's being used with a tripod. For better sharpness, you should either attach a remote release to your camera or set it to recognise that a wireless option is used, if you have one. If you don't, set the camera to an appropriate self-timer option.



## WHEN TO USE MANUAL FOCUS ON YOUR DSLR



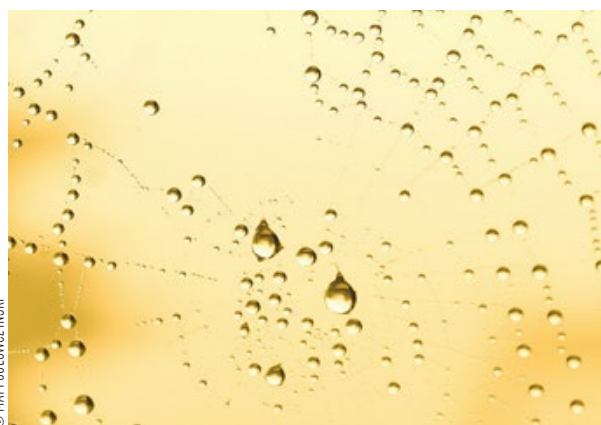
### Fireworks

The fleeting nature of fireworks makes them poor candidates for autofocus. When shooting fireworks, you will likely want to focus to a desired point before using manual focus to take the picture.



### Shooting through obstructions

When shooting through a fence, railing or window, or when subjects pass between the camera and intended subjects, autofocus systems can become confused. Manual focus is also useful when focusing on window details.



### Macro

Manual focus is particularly important when shooting close up, as any small focusing inaccuracies can mean a subject's focal point (an insect's eye, for example) isn't as sharp as the secondary areas.



## 2 Check aperture changes

Turn on your camera's live-view option. Even though you can adjust aperture while using live view, it doesn't mean the aperture physically changes, which can affect depth of field. Another way to view aperture changes is to look through the lens and see if the diaphragm changes size. On cameras that do not adjust aperture in live view, there may be the option of checking depth of field with a specific control.



## 4 Go manual and zoom

Switch to manual focus. Your camera may provide 5x and 10x options or even higher zooms, or adjustment in finer increments. The choice depends on the subject and how much you need to check the subject's details. Turn the focusing ring slowly until the subject is in focus. Very slightly, move your focus back and forth a few times to ensure accurate focusing.



## 3 Frame your image

To help frame your image, you may wish to use the autofocus system to get a rough approximation of focus. Depending on what you're shooting, composing could be easier with a grid superimposed over the scene, or an electronic level if your camera has one. Also, adjust exposure settings to suit the scene.



## 5 Check depth of field and release the shutter

If you know your camera isn't physically adjusting the aperture as you change magnification, make sure there's some way of checking depth of field accurately, and move around the scene using your camera's directional controls if necessary. Zoom in to your chosen subject to check any adjustments.



## Visual notifications on camera

AS WITH certain film bodies, it's often possible to use manual focus on a DSLR in combination with visual notifications that focus has been achieved. This is typically the same focus confirmation light that's active when using autofocus. These notifications usually appear alongside the exposure information in your camera's viewfinder. As this feature makes use of your camera's phase-detect autofocus system, it stands to be affected by any autofocus microadjustment you may have previously performed when checking the image. Therefore, it's important to make sure that the AF microadjustment is correctly adjusted or disabled.

Using manual focus in conjunction with visual notifications can help you obtain maximum sharpness



© ROSS HODDNOTT



© MATT GOLOWCZYNSKI

## Panning

Although advanced AF systems can be used to pan many subjects, you can also fix the focusing distance manually beforehand. With this technique, you should ensure the subject remains within the focused area determined by your depth of field.



© MATT GOLOWCZYNSKI

## Light trails

Autofocus is less useful when looking to capture light trails from traffic, unless you can focus on an appropriate fixed point in the scene. In such cases, manual focus, potentially in conjunction with hyperfocal focusing, is a common alternative.



© ISTOCKPHOTO.COM/JUSTINREZNIK

## Infrared photography

Infrared rays form an image at a plane beyond that of the visible spectrum, which means the focus has to be shifted to this point manually. Older lenses, and a handful of modern ones, may sport red markings on their barrel to facilitate this.



## Manual focus on mirrorless cameras

The arrival of mirrorless cameras has allowed manufacturers to craft new lens lines with a fresh perspective, both optically and with regard to external controls. The trend has been for control to shift from the lens's barrel to the camera, and although the vast majority of lenses



are still designed with focusing rings, manual focus here usually works in a different manner than that on optics designed for DSLR lines.

Traditionally, focusing rings have had some kind of mechanical coupling to the focusing group. In contrast, most lenses designed for mirrorless cameras work on a principle commonly referred to as 'focus by wire'. Here, turning the focusing ring will instruct the camera to drive the focusing group electronically, with its response and angle of rotation determined by firmware.

Such a set-up usually means there are neither physical stops at either end of the focusing scale, nor any physical markings on the barrel for distance (typically displayed on the camera's viewfinder or rear display). This allows for a simpler lens design, but there can be a minor lag

between turning and response. In addition, as the response of the system is often dependent on velocity, it becomes more difficult to pull focus with precision when recording video. For this reason, many videographers will tend to be drawn to mechanically coupled lenses.

## Focus peaking

Focus peaking has become a sought-after feature on enthusiast and professional camera bodies, particularly on those intended for video capture (this feature first originated from video cameras). Strictly speaking, focus peaking does not provide an entirely accurate view of what's in focus, but places highlights over details in the scene where edge contrast is highest. The correlation between the two is strong enough for this to be often relied upon as a guide to focus, although how it appears will vary with subject contrast and the lens used, among other things.

Some cameras provide no more than on/off control over this feature, although many recent models have this fleshed out with additional controls. The most common option is control over the colour of the highlight, which you may wish to change to contrast better against your subject. A default white highlight, for example, isn't entirely useful when shooting a predominantly white flower, so a red or yellow option may be preferred.

Another useful but lesser-seen option is the peaking level, which gives you say over the contrast threshold. As a general rule it's useful to increase this level when your scene is high in contrast, or when the lens you're using is particularly sharp, so that the camera only displays the edges that are highest in contrast. If using a lens with an aperture ring, you may also find this useful when shooting at smaller apertures where depth of field may be greater. For the same reason, decreasing it will help you when working with

Mounting your camera on a tripod will allow you to focus accurately without fear of camera shake



## KEEPING THINGS STEADY

WHEN you're focusing manually, any movement of either the camera or subject can affect your picture. Thus, it's a good idea to mount your camera on a firm support (and trigger the shutter remotely) to reduce the chances of camera shake, and do what you can to keep the subject steady.

Tripods with reversible central columns, such as the Manfrotto 055XPRO3, are ideal for macro photography (one genre in which manual focus is pretty common) as they enable you to switch to a horizontal position and make precise adjustments while shooting at ground level. Focusing rails (also known as micro-positioning plates) are good as they can attach to

your tripod and enable precise positioning with just a touch of the fingertips.

When it comes to keeping your subject steady, less sensitive macro subjects (such as plants) can often be held steady using floristry wire or tied back with string. For a firmer grip consider investing in a Wimberley Plamp II – one end of this flexible arm clamps to the leg of your tripod while the other can be used to hold a windblown object, reflector or backdrop.



The Manfrotto 055XPRO3 tripod has a reversible central column

## Benefits of tethered shooting for MF

The LCD monitor on the back of your camera is perfect for making major adjustments to composition,

but as it only measures 3in or so it's not always the best way to make precise adjustments to focusing. As we've seen, most DSLRs now allow you to select a small area and magnify it on-screen, but when you're looking for super-fine adjustments use an external device, such as a laptop or tablet, and take advantage of the larger screen.

Controlling your camera via an external device has many benefits, aside from the improved screen size. If you're shooting an especially flighty subject (such as a butterfly, for example), it enables you to keep further back, minimising any disturbance. What's more, you can perform adjustments to many frequently used camera settings (including aperture, shutter speed, ISO, and so on) without physically touching the camera – this will inevitably reduce camera shake.



low-contrast subjects and wider apertures, and when using older lenses that may optically lack the bite of more modern designs.

### Magnified view

The most accurate method to assess focus is to magnify into the part of the scene that you want to render sharply before manually adjusting your focus; this will give you the clearest idea of what the sensor will capture. Many mirrorless cameras automatically do this as you begin to adjust the focusing ring when using manual focus, jumping back to the original composition once you have finished doing so. Those cameras that

don't do this may have the option of being set up in this way.

Alternatively, you may be able to magnify into the scene using your



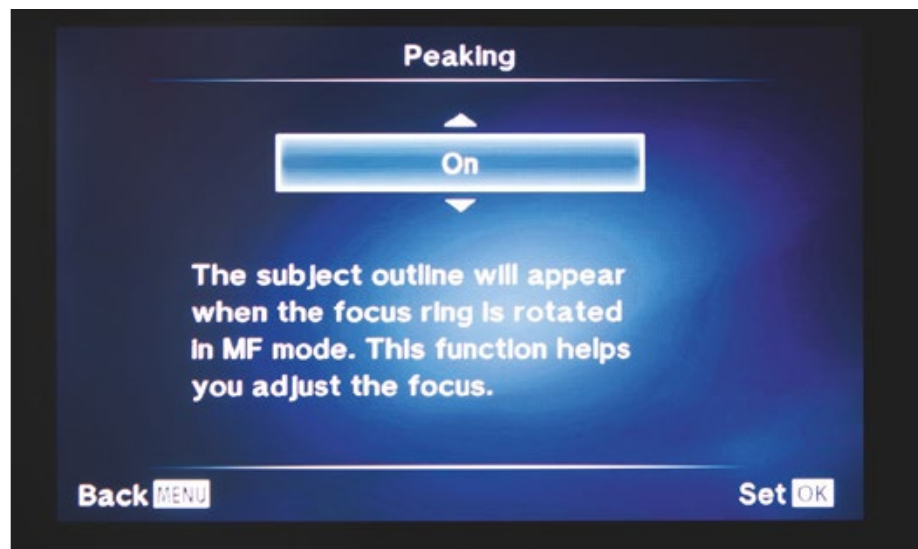
To assess focus, magnify part of the scene

camera's zoom-in and zoom-out controls, although you may find that at extreme magnifications the feed becomes less stable and harder to use, particularly if your camera doesn't have some kind of image-stabilisation system.

On some cameras it is possible to use this in conjunction with focus peaking, which can give an even better idea of what is and isn't in focus. You may find this feature useful when the subject is at a distance, perhaps when using a wideangle lens where the magnification will render the subject much smaller than if it were captured closer to the camera, or in very bright conditions where the screen may be more difficult to view.

AP

## Guide to using focus peaking



### 1 Enable focus peaking

First, find the focus-peaking option in your camera's menu system, bearing in mind that this may be under a general heading with other manual focus-assist options. If you have control over the colour, choose one that contrasts with your subject, and adjust the peaking level if you feel the need to. If you're not sure whether to adjust this, leave it on the default setting.



### 3 Focus using peaking

Now is the time to fine-tune your focus. Switch to manual focus if you haven't already and move the focusing ring slightly to see where the highlight appears. You want this to be at its maximum level over the key element in the scene. If your subject covers a range of distances, ensure that your depth of field is wide enough to render it entirely in focus.

### 2 Compose your image

Now find an approximate focus so that you can compose your image. As with the previous method you can do this with autofocus initially, before switching to manual focus, or you can simply do it with manual focus to begin with. If you've chosen to use manual focus, you should already see the focus-peaking function appear – if not, move to the next step.



### 4 Release the shutter

When you are happy with your focus, release the shutter. For maximum sharpness, consider using a remote release of some kind or your camera's self-timer option. This will reduce camera shake and keep the image sharp.



# Evening Class

Photoshop guru **Martin Evening** sorts out your photo-editing and post-processing problems

## Processing an infrared capture

JAMES Duffy shot this photo at Box Hill in Surrey, using a Nikon D50 with a 720nm infrared filter attached to its lens. Such filters enable you to shoot in infrared with any camera, but you do lose a few stops in exposure so, to compensate, you'd need to increase the exposure or the

ISO. The 720nm filter is a good compromise for users seeking a typical infrared effect where the foliage in a scene appears white. This image was taken in February, so there wasn't much live foliage and the infrared effect is rather subtle. Even so, the composition worked well.

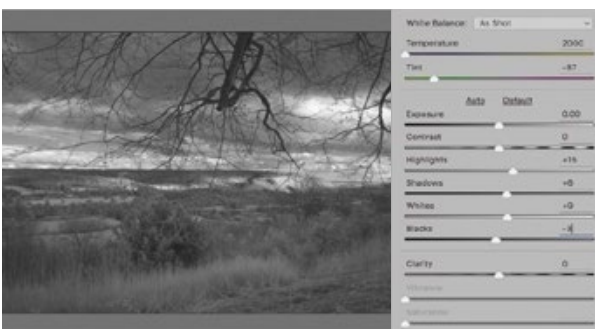
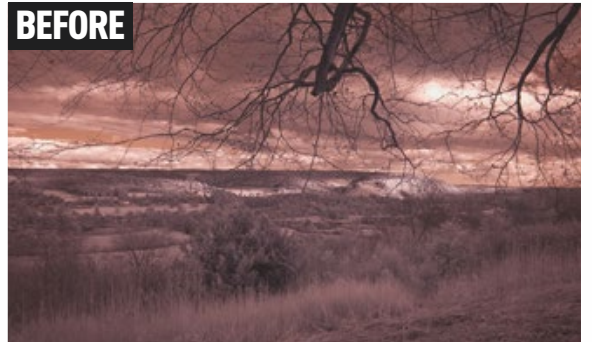
### Submit your images

Please see the 'Send us your pictures' section on page 3 for details or visit [www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk)

**AFTER**

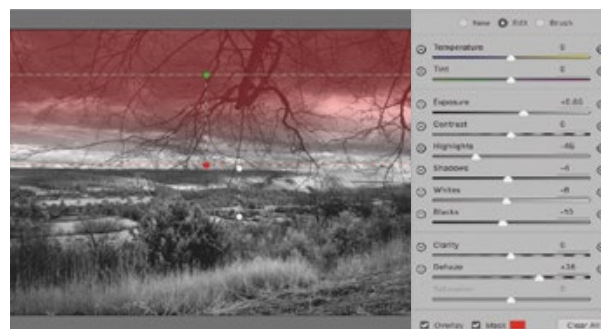


**BEFORE**



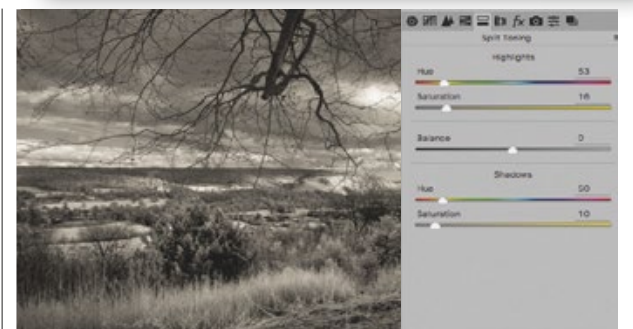
### 1 Convert to black & white

I opened the raw image in Camera Raw, where I went to the HSL/Grayscale panel and clicked on Convert to Grayscale. I then went to the Basic panel and made tiny adjustments to the Highlights, Shadows, Whites and Blacks sliders. The aim was to compress the tone range as a starting point for further adjustments.



### 2 Add graduated filters

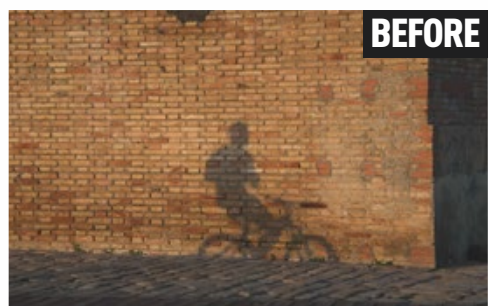
I added a Graduated Filter adjustment to the bottom half of the image, where I made +23 Clarity and +69 Dehaze adjustments. This added more tone separation to the image. I then added a second Graduated Filter adjustment to the sky where I darkened the Exposure and Highlights and applied a lesser amount of Dehaze.



### 3 Adjust the black & white sliders

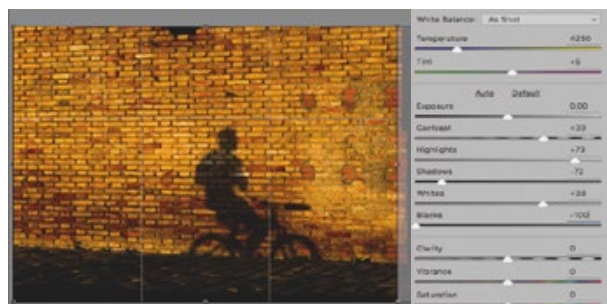
Finally, I went to the Split Toning panel and adjusted the Amount and Saturation sliders for the Shadows and Highlights to apply a split-tone effect to the black & white image. I also applied slightly different hue colour and saturation values to the shadows and highlights.





## Adding rich colour contrast

IN THIS image, Jim Young has captured the shadow of a passing cyclist as it is projected against a rough brick wall. The viewpoint for this photo is remarkably uncluttered and it is a nice simple composition – there is just a cobblestoned street and the texture of the bricks. Cropping out the corner simplified the composition to draw the eye mainly to the shadow of the cyclist. One could remove the hole in the wall at the top of the frame, but leaving it in helped to emphasise the distressed state of the wall. While the original raw image shows what the scene probably looked like at the time of capture, the processed version shows how this image could be enhanced by adding rich colour contrast.



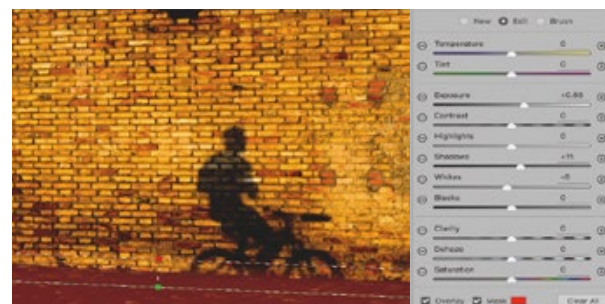
### 1 Crop the image

To start with, I selected the Crop tool and applied the crop shown here to remove the wall corner on the right. In the Basic panel I adjusted the tone sliders to add more global contrast. I then dragged the Highlights and Whites sliders to the right and the Shadows slider and Blacks slider to the right. This also added more tone contrast.



### 2 Adjust the Tone Curve

In the Tone Curve panel I adjusted the Highlights, Lights and Darks sliders to create the tone curve shape shown here, which lightened the lighter portions of the image and added a further contrast kick to the midtone and highlight section where the curve was steepest. I also used the tone range split point sliders to fine-tune the curve shape.



### 3 Add a Graduated Filter effect

I added a Graduated Filter adjustment to the lower section of the photograph, where I added a +0.65 Exposure adjustment and a +11 Shadows adjustment to lighten the bottom section of the image. This added more contrast and sparkle to the cobblestones to balance them with the lightness of the bricks.

## Contrast adjustments and colour

WHENEVER you adjust the tone contrast in an image, this also affects the colour. Basically, as you add more contrast, or increase the steepness of the tone curve, this has the effect of increasing the colour saturation in the image. When applying a Photoshop Curves adjustment, the hue colour values can shift slightly as well; however, with Lightroom and

Camera Raw there is a built-in hue lock mechanism to prevent this from happening. In Photoshop it is possible to isolate the saturation boost effect by applying a Curves adjustment as an Adjustment layer and changing the blend mode to Luminosity. While this does allow you to accurately preserve the saturation and hue values, the result can end up

looking rather flat – and therefore, a slight increase in saturation will look more natural. The latest version of Phase One's Capture One features a Luminance curve option that lets you fade between a full and zero luminance curve effect. This gives you full control to independently control the tone and colour as you adjust the contrast.



**Martin Evening** is a noted expert in both photography and digital imaging. He is well known in London for his fashion and beauty work, for which he has won several awards. Martin has worked with the Adobe Photoshop and Adobe Lightroom engineering teams over many years and is one of the founding members of a software design company. Visit [www.martinevening.com](http://www.martinevening.com)



Post the completed order form to:

**FREEPOST Time Inc.**

(No further address needed. No stamp required- UK only)

**YES!** I would like to subscribe to Amateur Photographer saving up to 35%

☐ **UK Direct Debit, pay only £24.99 per quarter, SAVING YOU 35% of the full price of £38.88**

**TOP  
OFFER**

☐ 2 years (102 issues) Credit Card- Pay only £201.99 (full price £311.00) saving 35% across the two years

☐ 1 year (51 issues) Credit card- Pay only £108.49 (full price £155.50) saving 30% across the year

#### YOUR DETAILS:

Mr/Mrs/Miss/Ms: Forename:

Surname:

Email:

Address:

Postcode:

Home Tel. No: (inc area code)

Mobile:

Date of Birth:

#### GIFT SUBSCRIPTION

Please fill out both the recipient's details and the 'Your Details' section above

Mr/Mrs/Miss/Ms: Forename:

Surname:

Address:

#### CHOOSE FROM 3 EASY WAYS TO PAY:

##### 1. CHEQUE

I enclose a cheque/postal order for: £\_\_\_\_\_ made payable to Time Inc. (UK) Ltd.

##### 2. CREDIT/DEBIT CARD

Please debit my: ☐ Amex ☐ Visa ☐ Visa Debit ☐ Mastercard

Card No.

Expiry Date

-

Signature:

(I am over 18)

Date:

##### 3. DIRECT DEBIT: To pay £24.99 per quarter by UK Direct Debit, please complete your details below:

###### PAYMENT DETAILS – DIRECT DEBIT

Instruction to your bank or building society to pay by Direct Debit.  
For office use only: Originators Reference – 764 221



Name of Bank:

Address of Bank:

Postcode:

Name of Account Holder:

Sort Code:

Account No:

Instruction to your Bank or Building Society: Please pay Time Inc. (UK) Ltd Direct Debits from the account detailed on this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Time Inc. (UK) Ltd and if so, details will be passed electronically to my Bank or Building Society.

Signature:

(I am over 18)

Date:

\*Pay just £24.99 payable by Direct Debit every three months, with the price guaranteed for the first 12 months. Offer open to new subscribers only. Direct Debit offer is available to UK subscribers only. Final closing date for all orders is **4th October 2016**. The full subscription rate is for 1 year (51 issues) and includes postage and packaging. If the magazine ordered changes frequency per annum, we will honour the number of issues paid for, not the term of the subscription. \*\*The digital version comes free with the print edition of your subscription and is available strictly on a trial basis. Time Inc. (UK) Ltd reserves the right to withdraw free access to the digital version at any time. The Rewards scheme is available for all active print subscribers of magazines published by Time Inc. (UK) Ltd, free of charge. Digital subscribers also get access as long as the subscription has been purchased directly through the publishers at magazinesdirect.com. Full terms and conditions are available at [mymagazinerewards.co.uk](http://mymagazinerewards.co.uk). For enquiries and overseas rates please call +44 (0) 330 333 4333 (lines are open Monday- Friday, 8:30am- 5:30pm UK time ex. Bank Holidays) or e-mail: [help@magazinesdirect.com](mailto:help@magazinesdirect.com). Calls to 0330 numbers will be charged at no more than a national landline call, and may be included in your phone providers call bundle. We will process your data in accordance with our Privacy Policy ([www.timeincuk.com/privacy](http://www.timeincuk.com/privacy)). By providing your information, you agree to be contacted by Time Inc. (UK) Ltd, publisher of Amateur Photographer and other iconic media brands, with information about our goods and services and those of our carefully selected third parties. Please tick here if you do not wish to receive these messages: ☐ by email and/or SMS ☐ by post and/or telephone ☐ about carefully selected third party goods and services.

**QAP code 15W**

# GO DIGITAL!

Download your  
magazine right away.

Every subscription package includes  
access to the digital version for iPad  
and iPhone\*\*



## PLUS

### ENJOY THESE FANTASTIC SUBSCRIPTION BENEFITS:

- **Save up to 35% off the normal subscription rate**
- **Enjoy the luxury of home delivery**
- **Get exclusive Rewards for subscribers every month. Join Rewards at [amateurphotographer.co.uk/rewards](http://amateurphotographer.co.uk/rewards)**

**Exclusive for  
subscribers**

*Rewards*

Every month enjoy new **offers, giveaways and prizes**, included **FREE** with your subscription. With all of this, your subscription will pay for itself in no time. View all Rewards at [amateurphotographer.co.uk/rewards](http://amateurphotographer.co.uk/rewards)



**0330 333 1113**

**Quote code: 15W**

**7 days a week from 8am to 9pm (UK time)**



# SAVE <sup>UP TO</sup> 35%

## when you subscribe today!\*



That's just  
**£1.96**  
per issue

THE DIRECT DEBIT GUARANTEE: This Guarantee is offered by all banks and building societies that accept instructions to pay Direct Debits. If there are any changes to the amount, date or frequency of your Direct Debit Time Inc. (UK) Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Time Inc. (UK) Ltd to collect a payment, confirmation of the amount and date will be given to you at the time of the request. If an error is made in the payment of your Direct Debit, by Time Inc. (UK) Ltd or your bank or building society you are entitled to a full and immediate refund of the amount paid from your bank or building society – If you receive a refund you are not entitled to, you must pay it back when Time Inc. (UK) Ltd asks you to. You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.



Subscribe online at  
**[amateurphotographersubs.co.uk/15W](http://amateurphotographersubs.co.uk/15W)**



**Complete  
the coupon  
opposite**



# Accessories

Useful gadgets to enhance your photography, from phones to filters...

## Manfrotto Off Road Stunt Backpack

£119.95 • [www.manfrotto.co.uk](http://www.manfrotto.co.uk)

**Matt Golowczynski** looks at a backpack aimed at the adventure seeker

### At a glance

- Holds one CSC/lens combination, three action cameras and a 12.9in tablet
- Integrated action-camera mount
- Included waterproof cover

MANFROTTO'S Stunt range is headed by this backpack – a lightweight, medium-sized nylon bag with an unconventional design. Unzipping its lid around its sides reveals a spacious inner compartment, which eschews the standard removable dividers for two removable pouches – one for a CSC/lens combination and another for up to three action cameras.

The main chamber contains a sleeve for a tablet and a generously proportioned mesh pocket against one of its walls. Through two wide-looped zips, the bag's contents can be accessed quickly from the top, although the main chamber opens fully in a butterfly-like fashion when the central zip is pulled down. The lid has a soft-lined pocket, and two more pockets at the side of the bag provide space for a small tripod, while an adjustable GoPro mount is positioned on one of the straps.

### Verdict

The shortness of the shoulder straps means the bag mounts in a somewhat top-heavy manner, although full adjustment over the chest, waist and shoulder straps allow you to tailor it to your body. But the nature of the zipped, removable pouches makes accessing their contents time consuming. I found it useful to place one pouch at the very top of the bag for quick access, and the other for lesser-used items further down.

While the pouch method of storage may put some off, the bag does provide decent flexibility and a reasonable level of protection.

**Amateur Photographer Testbench**  
★★★★★

### Hiking pole holder

Attachment points on the side allow you to carry a couple of walking poles or even a tripod.



### Rear pocket

A hydration compartment at the rear doubles as storage for other flat items.

### Adjustable harness

The included waist and chest belts help to distribute the bag's load.



### ALSO CONSIDER

#### Thule Legend GoPro Backpack

£130, [www.thule.com/en](http://www.thule.com/en)

This alternative bag also holds three action cameras (here in a crushproof compartment) and features two GoPro mounts.



#### Incase Sling Pack

£119.95, [www.goincase.co.uk](http://www.goincase.co.uk)

This sling option is designed with a faux fur-lined tablet compartment, as well as a Tensaerlite canister that accepts two GoPro cameras.



#### Tenba Shootout ActionPack 14L

£139, [www.macgroupeu.com](http://www.macgroupeu.com)

There's space for up to four action cameras and accessories, and a hydration chamber, in this option from Tenba.





# Barber Shop Razor Cut Leather Wrist Strap

£45 • [www.barbershopbags.com/en](http://www.barbershopbags.com/en)

The Razor Cut wrist strap works best on cameras with large handgrips



ITALIAN company Barber Shop specialises in real-leather camera bags, straps and accessories, with unusually stylish and high-quality designs. Its Razor Cut wrist strap is an elegant means of securing your camera if you prefer not to use a neck strap.

The design is fairly straightforward, consisting of a wide leather strap lined with soft microfibre material, which loops around onto itself using a metal D-ring. This wraps loosely around your wrist in normal use, but if you accidentally let go of the camera, the strap pulls through and tightens, hopefully saving your kit from a costly fall.

The strap clips onto your camera's lug using a chunky metal carabiner, with a large protective leather pad beneath to protect the camera body from scratching. If your camera has slot-type lugs, the idea is to attach the strap using a sewn-in loop of red, white and blue-striped material, which passes through the lug then clips onto the carabiner. While this approach does work, I'd be decidedly nervous about trusting a heavy DSLR to this slim loop of ribbon.

Indeed, having tried the Razor Cut strap on a range of cameras, I found it only really worked well with larger enthusiast models that have decent size handgrips and eyelet-type lugs – essentially cameras such as the Nikon D7200, Pentax K-1 or Sony Alpha 7 II. On smaller cameras such as the Olympus OM-D E-M5 II or Fujifilm X-T1, it's just too bulky to be comfortable to use, and the pad that protects the camera gets in the way of your grip.

Available in four finishes – black, brown, perforated dark brown and a rather questionable calf-hair option – the Razor Cut strap is made of high-quality leather and impeccably finished. It also comes very presentably packaged, so could make a nice gift.

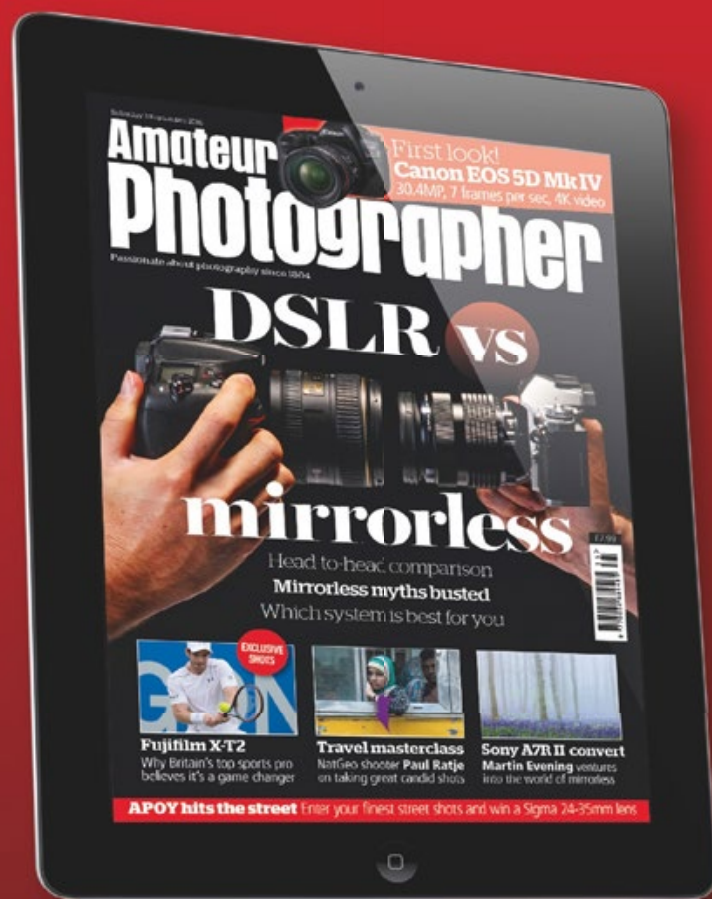
Andy Westlake



The inside is padded with a soft suede material

# Amateur Photographer

The latest photography kit and technique at your fingertips



More great pictures  
More technique  
More opinion  
More inspiration

- Download online, enjoy offline
- Buy from the comfort of your own home
- Available the day the magazine goes on sale
- Missed an issue? Simply download a back copy

Try it today

[www.amateurphotographer.co.uk/digital-edition](http://www.amateurphotographer.co.uk/digital-edition)

Download on the App Store

Google play

kindle fire

zinio



INSPIRED  
Travel  
Photographer  
2016



# WIN a holiday in the Gambia

Send in your inspiring travel photograph and you could win a fantastic seven-night holiday to The Gambia for two, and have your image printed in AP and Lonely Planet Traveller magazine

AP AND *Lonely Planet Traveller* magazine have joined forces to offer one lucky reader the chance to win a seven-night holiday for two to The Gambia in our Inspired Travel Photographer 2016 competition. And that's not all – we also have a Fujifilm X-T10 for each of the three category winners.

## How to enter

There are three categories you can enter:

### 1 People

We want to see your pictures of people – in the home, on the streets or on your travels.

### 2 Places

The world is a big place, with its sprawling cities, endless oceans and dark forests, but what are the places that inspire you.

### 3 Nature and wildlife

For this round we're looking for your images of beautiful landscapes, and the plants and animals that live within them

Closing date 30 November 2016. Full terms and conditions online



FUJIFILM  
X-T10

## Prizes galore up for grabs

Our overall winner will receive a seven-night holiday for two in The Gambia, courtesy of The Gambia Experience ([gambia.co.uk](http://gambia.co.uk))

The overall winner will stay for three nights in the stunning Ngala Lodge and four nights in the Mandina Lodges in the Makasutu Forest where you'll receive:

- Guided forest walks
- River trip by pirogue
- Return flights from Gatwick
- Half-board at the Mandina Lodges and b&b at the Ngala Lodge

The overall winner will also be invited to photograph this dream trip and have their work featured in *Lonely Planet Traveller* and *Amateur Photographer* magazines. PLUS

Each category winner will win a Fujifilm X-T10 camera worth £779. This compact mirrorless digital camera turns any trip, whether in everyday life or to the other side of the world, into the ultimate photo opportunity. Visit [fuji.co.uk/x-t10](http://fuji.co.uk/x-t10).

Enter online at [amateurphotographer.co.uk/inspiredtraveller](http://amateurphotographer.co.uk/inspiredtraveller)



# Bag yourself a bargain

**Michael Topham** goes in search of the best lenses money can buy with £200 to spend

If there's one thing we can all relate to when we're shopping, it's the satisfaction of picking up a bargain. Spending less than the original asking price on kit can be very satisfying, and it makes the effort that goes into finding a bargain worthwhile. If you're

prepared to have a look around, it doesn't take long to realise that not all lenses cost hundreds of pounds. In fact, there are numerous examples of interesting optics that can be picked up in brand-new condition for less than you'd expect.

There's a misconception by photographers that sub-£200 lenses should be avoided because they are too cheap to be any good. However, this certainly isn't the case, and provided you know what you're looking for there are some fantastic bargains to be had.

So, with £200 tucked away in our wallet,

what would we be prepared to spend our hard-earned cash on? A trawl of the internet produced a shortlist of more than 40 lenses that can be bought new for less than £200. After whittling our shortlist down, we've assembled 12 lenses that stand out, either for being highly regarded in terms of image quality or for offering great value or something slightly different.

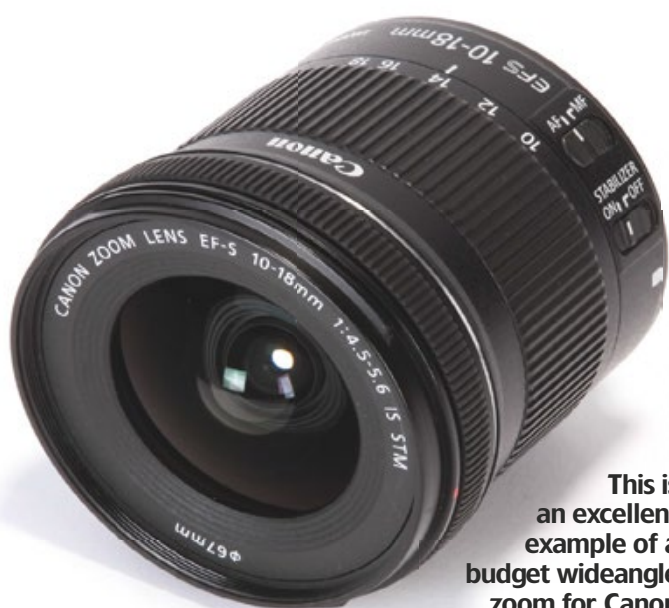
In the cases where one manufacturer offers more than one great lens under £200, we've recommended a few alternatives that you may also want to consider. And, while this round-up primarily focuses on new lenses that you can buy on a budget, don't forget there are many excellent lenses available for great prices second-hand. Just be aware that some deals can be too good to be true when buying online, so we'd always recommend inspecting detailed photographs before you commit. ➤

**There's no shortage of great lenses you can buy if you're working to a tight budget. Turn over to read about the finest lenses for under £200**





A wideangle lens is vital when you're shooting in tight, confined spaces and you want to squeeze close subjects in the frame



This is an excellent example of a budget wideangle zoom for Canon APS-C DSLR users

### Canon EF-S 10-18mm f/4.5-5.6 IS STM

● £179 [www.canon.co.uk](http://www.canon.co.uk)

IF YOU own a Canon APS-C DSLR such as the EOS 760D or EOS 80D, and find it a struggle at times to contain everything that's in front of you in the frame, you'll want the option of being able to pluck a wideangle lens from your kitbag. Canon's lightweight 10-18mm zoom

(equivalent to 16-30mm) comes with a number of attractive features, including 4-stop optical image stabilisation system and a stepper motor (STM) that allows it to focus silently and not disturb audio during movie recording. Weighing just 240g, the light weight of this lens means it avoids the top-heavy feeling one gets when using more cumbersome lenses on entry-level DSLRs. Also, landscape shooters will appreciate that focusing takes place internally, so turning the focus ring will not affect any graduated ND filters or polarisers mounted to the front.

Typically for this kind of lens, the 10-18mm zoom shows visible barrel distortion at its widest focal length, although it's not at all excessive. The relatively simple profile also makes it easy to fix. It reduces progressively on zooming in, and at 18mm there's barely any distortion at all. Taking price and performance into account, this is a great walk-around lens for the owner of any Canon APS-C camera who is interested in photographing landscapes, interiors or cityscape images. At such a competitive price, it's hard to think of a reason not to include this in your lens collection if you're looking to expand.

#### ALSO CONSIDER

Canon EF 50mm f/1.8 STM, £97

### Canon EF-S 24mm f/2.8 STM

● £125 [www.canon.co.uk](http://www.canon.co.uk)



The flat profile and fast aperture make the EF-S 24mm f/2.8 STM a great walkabout lens for those who want to travel light and shoot great images

AT ONE time, ultra-slim pancake prime lenses had a reputation for poor optical quality, as they simply couldn't fit in sufficient lens elements to achieve effective correction of aberrations. However, advances in lens design over recent years have changed all that. The EF-S 24mm f/2.8 STM (equivalent to 38mm)





Be careful not to damage the Spark's 37mm plastic filter thread

## Lensbaby Spark

● £59 [www.lensbaby.com](http://www.lensbaby.com)

LENSBABY is a company that has long made a virtue of using technically flawed optics for selective focus. Its simplest is the Spark – a single-element uncoated glass lens, mounted in a plastic bellows that can be manipulated to move a small area of sharp focus around the frame, blurring everything else. It's fully constructed from plastic, weighs 71g and has a 37mm thread for attaching filters. It's not an easy lens to master – bending, pushing and twisting the lens to achieve the desired result with the camera raised to your eye takes time to get used to, but with some patience you can create interesting blurred effects. It allows you to be more creative and experimental with your photography at very low cost. It's currently available in Nikon and Canon SLR mounts.

### ALSO CONSIDER

**Lensbaby 5.8mm f/3.5 Circular Fisheye (Micro Four Thirds), £199**

provides a wider field of view to a 35mm lens on Canon APS-C DSLRs. Given its compact size, it's understandable that optical image stabilisation is omitted and its slimline design also means there's no bayonet mount for a lens hood – you have to use a screw-in one and attach it via its 52mm filter thread instead. Driven by a stepper motor (STM), autofocus is fast and manual focus is electronically, rather than mechanically, coupled. This means that turning the smoothly damped focus ring drives the AF motor of the lens.

The build quality of this lens is exemplary for the price. It has a durable metal lens mount and the barrel is made from high-quality plastic. With its f/2.8 aperture, it can give quite nicely blurred backgrounds at close focus distances, and in general the bokeh is reasonably attractive. For beginners, this lens would make an excellent companion to a kit zoom, allowing handheld shooting in low light while keeping shutter speeds up to avoid motion blur. With its bargain price, carry-everywhere size and competent image quality performance, the Canon EF-S 24mm f/2.8 STM deserves to be high on the wish list of many a Canon user.

### ALSO CONSIDER

**Canon EF 40mm f/2.8 STM, £149**



Fisheye lenses can give interesting pictorial effects



## Samyang 7.5mm f/3.5 MFT fisheye

● £199 [www.samyang-lens.co.uk](http://www.samyang-lens.co.uk)

## Fujifilm TCL-X100 Tele Conversion

● £199 [www.fujifilm.co.uk](http://www.fujifilm.co.uk)



The TCL-X100 tele conversion lens presents a wide field of view to X100/X100S/X100T users

MICRO Four Thirds users who would like to explore fisheye photography should look at this affordable optic, which provides a diagonal field of view of 180°. With no rear metal contacts, metering is performed using the aperture ring, while focusing is performed manually via its smooth focus ring. Focus distances from infinity to its closest focus distance (9cm) are marked on the barrel, but there's no hyperfocal scale. Manual-focus-only lenses can be an off-putting factor for some users, but with better focusing aids on cameras today, not to mention the expansive depth of field this lens provides, it's not difficult to achieve pin-sharp results. If you can live without AF and want a fisheye lens that's a couple of hundred pounds cheaper, this Samyang lens is worth looking at.

### ALSO CONSIDER

**Samyang 16mm f/2 ED AS UMC CS (Micro Four Thirds) £199**

THIS conversion lens is designed to offer X100, X100S and X100T users something different. It turns the camera's fixed 35mm lens into a 50mm lens and employs an optical construction that's made up of four glass elements in four groups. The clean and stylish finish complements the retro cameras well, with the all-metal construction giving it a solid and robust feel. The lens widens towards the front and those who regularly find themselves raising the viewfinder to their eye will want to be wary of it obscuring the bottom right of the frame when it's attached. Available in black or silver, the TCL-X100 gives Fujifilm X100/X100S/X100T users the option of capturing different types of images with a narrower angle of view and sits alongside the WCL-X100 wide conversion lens (£210) that turns the fixed 35mm lens into a 28mm wideangle.

### ALSO CONSIDER

**Fujifilm X70 WCL-X70 Wide Conversion lens, £149**





This Olympus is the smallest and lightest Micro Four Thirds lens available

## Olympus 9mm Fisheye f/8 Body Cap

● £67 [www.olympus.co.uk](http://www.olympus.co.uk)

LENSES don't come much more petite than the Olympus 9mm Fisheye f/8 Body Cap lens. As its name suggests, this extremely compact optic is so small and lightweight that it gives the impression you're carrying the camera around without a lens attached. Measuring 12.8mm thick and weighing just 30g, it offers an extremely wide 140° field of view. Due to the fact it has no metal contacts, you may be required to enable the 'shoot without lens' option on your camera before adjusting the plastic lever that's used to focus it manually.

Given the vast depth of field that's achieved with a 9mm fisheye lens, you'll find yourself shooting with the plastic lever set to infinity most of the time – just be careful not to knock it. As lenses go, it's fun to use, slips into a camera bag with ease and is a good option for Micro Four Thirds users who'd like to experiment with fisheye perspectives without having to fork out hundreds of pounds.

### ALSO CONSIDER

**Olympus M.Zuiko Digital 45mm f/1.8**, £179

The Olympus 45mm f/1.8 is excellent for portraiture and was also used for this week's cover shot



The tiny 12-32mm f/3.5-5.6 from Panasonic weighs just 70g

## Panasonic Lumix G Vario 12-32mm f/3.5-5.6 Asph Mega OIS

● £199 [www.panasonic.co.uk](http://www.panasonic.co.uk)

THIS standard lens is often found supplied as part of a kit with Panasonic Micro Four Thirds bodies and made its entrance into the market at the same time as the Lumix DMC-GM1. Since then, we've seen it bundled with other models such as the Lumix DMC-GX80 and it can now be picked up on its own in silver or black for a fraction under £200. Its big appeal is its size, and unlike Panasonic's Lumix G X 14-42mm f/3.5-5.6 Asph Power OIS lens that's noticeably larger and heavier, this tiny optic weighs just 70g and juts out from the lens mount by 24mm when it's collapsed. It's equivalent to a 24-64mm lens on a full-frame camera, performs focus internally to ensure the front doesn't rotate and accepts filters via a 37mm thread at the front. Although it exhibits corner softness at its widest apertures, centre sharpness is very impressive and it does a good job of controlling chromatic aberrations.

As far as its build quality goes, it's made from plastic, yet feels reassuringly well made. There's no dedicated manual-focus ring, but most users will find themselves relying on autofocus, which shows no fuss locking onto subjects fast and accurately. Panasonic users looking for a convenient walkabout lens that's neither too heavy nor cumbersome will love it.

### ALSO CONSIDER

**Panasonic Lumix G Vario 45-150mm f/4-5.6 Asph Mega OIS**, £169



The lightweight 35mm f/2.4 makes a great companion to a kit zoom for Pentax users

## Pentax smc DA 35mm f/2.4 AL

● £108 [www.ricoh-imaging.co.uk](http://www.ricoh-imaging.co.uk)

PENTAX users looking for an inexpensive but more than capable fixed-focal-length prime lens with an angle of view that's roughly equivalent to a traditional 50mm standard lens will find this optic extremely appealing. It has a 30cm minimum focusing distance and is constructed of six elements in five groups, with six aperture blades. It features the old-style of autofocus, which is driven by the camera's AF screw, as opposed to featuring a newer type of internal autofocus motor. The downside of this is that it whirs and is quite noisy in use.

The lens delivers an impressive level of sharpness, with its sweet spot being located around f/4. For Pentax users who bought their DSLR with an 18-55mm kit lens, the smc DA 35mm f/2.4 AL makes a sound second choice. Its image quality does outshine its build quality.

### ALSO CONSIDER

**Pentax smc DA 50mm f/1.8**, £82

## Nikon AF-S DX Nikkor 55-200mm f/4-5.6G ED VR II

● £195 [www.nikon.co.uk](http://www.nikon.co.uk)



This Nikon lens is compact when retracted but extends from its locked position to 55mm and beyond to 200mm





A 'nifty fifty' should find a home in everyone's bag

## Nikon AF-S Nikkor 50mm f/1.8G

● £169 [www.nikon.co.uk](http://www.nikon.co.uk)

THE so-called 'nifty fifty' is a popular lens for those who'd like to shoot with a similar field of view to that of human vision. Nikon has turned out no fewer than six 50mm f/1.8 lenses since 1978, with this lens being the company's most recent. Unlike the older D-series optics, this G-series model doesn't have an aperture ring and benefits from a Silent Wave Motor (SWM) for fast and silent focusing. It's compatible with Nikon's entry-level DSLRs that don't have an autofocus motor built into the body, such as the D3300 and D5500, and although it's one of the cheapest Nikkor lenses, it doesn't scrimp on build quality. It exhibits a little barrel distortion and vignetting is obvious at its widest apertures, but this isn't too much of a concern and can be easily corrected in post-processing. Whether it's used on a full-frame body or an APS-C DSLR (equivalent to 75mm), the AF-S Nikkor 50mm f/1.8G should find a place in most Nikon users' kit bags. We class it as one of the best lenses you can buy for under £200.

### ALSO CONSIDER

**Nikon AF-S DX Nikkor 35mm f/1.8G**, £159

WHEN it was announced in early 2015, the Nikon AF-S DX Nikkor 55-200mm f/4-5.6G ED VR II hit the market with a recommended retail price of £279. A year and a half later and we've seen the price of this consumer-grade optic drop to just shy of £200. Its popularity lies with those who outgrow the 18-55mm kit lens that comes bundled with many Nikon APS-C DSLRs, and it meets the promise of delivering extra reach to photographers who want to get closer to distant subjects.

This lens has a built-in autofocus motor and features Nikon's Vibration Reduction (VR) II system, enabling users to shoot handheld shots 4 stops slower than would otherwise be possible. It extends considerably upon zooming from its retracted locked position to 55mm and beyond to 200mm. It should also be noted that it's not the fastest focusing lens and the filter thread does rotate during focusing, which ultimately makes it more challenging to use with any filters or adapters.

### ALSO CONSIDER

**Nikon AF-S DX Micro-Nikkor 40mm f/2.8G**, £185



The Sigma's barrel has a clean, minimalist exterior design

## Sigma 60mm f/2.8 DN | A

● £119 [www.sigma-imaging-uk.com](http://www.sigma-imaging-uk.com)

THIS diminutive optic sits beside Sigma's 19mm f/2.8 DN | A (£119) and 30mm f/2.8 DN | A (£119) lenses, and is designed for those who'd like a fast prime with an equivalent angle of view of 120mm on the Micro Four Thirds system and 90mm on the E-mount system. It

falls into Sigma's 'Art' line of lenses and features a linear focusing system, which delivers a reliable autofocus performance. There is a slightly alarming rattle when the camera is switched off and when it isn't coupled to a camera, but this is typical for the type of focusing system used and shouldn't be a concern.

It's a lightweight lens (190g) that complements the compact dimensions of smaller CSCs and delivers sensational sharpness in the centre at f/2.8. The best edge-to-edge sharpness, or sweet spot as it's also known, is located closer to f/5.6. The combination of a metal and high-quality plastic construction makes it feel more expensive than it is, and Micro Four Thirds and Sony E-mount users after an inexpensive telephoto prime that's complementary to the subject of portraiture should look no further.

### ALSO CONSIDER

**Sigma 30mm f/2.8 DN | A (Micro Four Thirds)**, £119

## Tamron 18-200mm f/3.5-6.3 Di II VC

● £168 [www.intro2020.co.uk](http://www.intro2020.co.uk)

SUPERZOOMS are often considered ideal lenses for travel photography and they're perfect for the times when you're looking to maximise shooting time and minimise the wasted seconds spent changing lenses between shots. The most important feature of this Tamron lens is its broad zoom range, which is equivalent to 28-300mm in 35mm full-frame terms. The optical formula of 16 elements in 14 groups includes one hybrid aspherical element and one low-dispersion glass element to reduce aberrations. Other superzooms tend to use more special elements, and this undoubtedly helps explain the Tamron's low cost. Optical image stabilisation is built in and an internal focusing mechanism means the 62mm filter thread doesn't rotate, simplifying the use of ND and polarising filters.

Image quality is pretty typical for a superzoom. It is sharpest at wideangle, especially in the centre of the frame, and gets

progressively softer as you zoom in, with little in the way of really fine detail at longer telephoto settings. There's also fairly strong barrel distortion at wideangle, turning to pincushion across most of the remainder of the range. Despite its bargain price, this lens doesn't make too many concessions compared with its more expensive peers. If you're prepared to shoot in raw and post-process away evident flaws, images will look just fine, unless you like to print large or scrutinise them for pixel-level detail. You'd no doubt get technically better files by using two shorter-range zooms, but if, in practice, you don't have the inclination to change lenses between shots, the point is moot: getting a shot that's not especially sharp at 200mm beats not getting one at all.



This Tamron lens gives a really useful zoom range. It's available in Canon and Nikon mounts







# Southampton's London camera exchange PROcentre

FIRST FOR CUSTOMER SERVICE – PART EXCHANGE SPECIALISTS

# 1956 2016 YEARS

## 11 CIVIC CENTRE RD, SOUTHAMPTON SO14 7FJ

**PRO Dealer**  
**NIKON PROFESSIONAL DEALER**



**FREE 2 YEAR WARRANTY**

on DSLRs, CSCs & kit lenses,  
+ CoolPix compacts.  
HURRY - offer ends 30.09.16  
(requires registration)

OTHER MAJOR BRANDS STOCKED:

**FUJIFILM**

**Panasonic**

**SIGMA**

**TAMRON**

**Manfrotto**  
Imagine More



**Lastolite**

**NIKON PROFESSIONAL DEALER – ORDER ONLINE AT [WWW.LCEGROUP.CO.UK/NIKON](http://WWW.LCEGROUP.CO.UK/NIKON)**

### TOP DSLR DEALS

#### NIKON D5 BODY ONLY

Flagship 20.8MP FX Pro DSLR with 153-point AF & 200-shot RAW buffer. 4K high-definition D-movies, 12 fps with AF tracking & 14 fps with mirror up.

**£5199.99**

trade-up only... **£4000**  
& your Nikon D4 body



STOCK NOW ARRIVING!

#### NEW! NIKON D500 BODY ONLY

Latest 20.9-MP DX-format Sensor. 100-51200 ISO expandable to 1640000 D5-style AF with 153 Focus Points, 10 fps Shooting, 200 Shot RAW Buffer 4K Movie with 8MP Stills Grab & Electronic VR.

**£Phone**

trade-up only... **£Phone**  
& your Nikon D7000 body



LIMITED STOCK AVAILABLE!

CHECK WEBSITE FOR LATEST DEAL!

#### NIKON D810 BODY ONLY

Latest 36.3MP FX Pro design, up to 7fps, 51200 max ISO with reduced noise, HD 1080/60p Movie.

**£Phone**

trade-up only... **£Phone**  
& your Nikon D7000 body



CHECK WEBSITE FOR LATEST DEAL!

#### NIKON D7200 BODY ONLY

Latest 24.2MP semi-pro DX DSLR: Powerful low-light AF, improved high ISO capability, advanced movie performance & control +timelapse, WiFi & NFC, Expeed 4 processor.

**£Phone**

trade-up only... **£Phone**  
& your Nikon D90 body



NIKON D7200 & 18-105mm VR Kit  
**£Phone**

#### NIKON D750 + 24-120MM F/4 VR AF-S G ZOOM KIT

Latest 24.3 FX design, compact mag-alloy & carbon fibre body, 3.2" tilt LCD & 6.5fps shooting.

**£2399.99**

trade-up only... **£2050**  
& your Nikon D600 body



LIMITED STOCK AVAILABLE!

NIKON D750 body only  
**£1699.99**

#### NIKON D5500 + 18-55MM VR AF-P ZOOM

Ultra slim & compact body, 24.2MP DX sensor, 3.2" vari-angle touch-screen LCD, 5fps shooting & built-in WiFi.

**£629.99**

trade-up only... **£540**  
& your Nikon D5000 + 18-55mm VR lens



FREE NIKON SPARE BATTERY, CAMERA BAG & KEY RING LENS CLOTH  
worth £49.99  
Ends 30/9/16

#### NIKON DF BODY ONLY

Pure photography - 16.2MP FX sensor housed in a retro-styled weather sealed metal body. Pre-Ai lens compatible, 39 AF points and up to 204,000 ISO.

**£1899.99**

trade-up only... **£1750**  
& your Nikon D300s body



NOW BACK IN STOCK

#### NIKON D3300 + 18-55MM VR AF-P ZOOM

Ultra compact body, 24.2MP DX sensor, built-in Guide Mode, up to 12,800 ISO, 5 fps shooting & 11 AF points

**£Phone**

trade-up only... **£Phone**  
& your Nikon D3000 + 18-55mm VR lens



ADD NIKON SPARE BATTERY, CASE, ML-L3 REMOTE & KEY RING LENS CLOTH FOR ONLY **£49.99**  
Ends 30/9/16

### TOP NIKKOR LENSES



**NEW NIKKOR 200-500MM**  
F/5.6E VR AF-S ED

**£1179.99**



**NIKKOR 70-200MM**  
F/2.8G ED VR II AF-S

**£1749.99**



**NEW NIKKOR 24-70MM**  
F/2.8E VR AF-S

**£1979.99**



**NIKKOR 16-35MM VR**  
F/4 G AF-S ED

**£969.99**



**NIKKOR 28-300MM**  
F/3.5-5.6G ED VR AF-S

**£729.99**



**NIKKOR 85MM**  
F/1.8G ED AF-S

**£429.99**



**NIKKOR 18-300MM**  
F/3.5-6.3G ED VR

**£599.99**



**NIKKOR 300MM**  
F/2.8G ED VR II AF-S

**£3999.99**

**WIDE RANGE OF NIKON DSLR, LENS & ACCESSORY STOCKED - CHECK WEBSITE FOR THE LATEST DEALS!**

### TOP DSLR DEALS

#### NEW! CANON EOS-1D X Mk II BODY ONLY

Phenomenal spec 20.2MP Full Frame Pro DSLR, 4K Movie, up to 16fps shooting, 61 point AF with 41 Cross-type sensors.

**£5199.99**



STOCK ARRIVING NOW! + FREE 64GB CF CARD & READER from Canon UK Ends 31/10/16

#### CANON EOS 7D Mk II BODY ONLY

New 20.2MP APS-C semi-pro design. DIGIC6 processors, 10fps, 51200 max ISO & 45 AF points.

SRP £1599.99

**£Phone**

#### CANON EOS 80D BODY ONLY

Latest 24.2MP APS-C sensor, 45 Cross-type AF sensors, WiFi & NFC, low vibration & noise shutter, intelligent 100% viewfinder.

**£999.99**

trade-up only... **£825**  
& your EOS 60D Body



EOS 80D & 18-135mm IS Nano USM kit  
**£1299.99**  
+ FREE personalised Neckstrap from Canon UK!

### TOP LENSES

LIMITED STOCK AT THESE PRICES!

#### EF 100-400mm F/4.5-5.6 L IS USM MK II

Fabulous sports/wildlife pro-quality long-range tele-zoom. SRP £1999.99

**£1649.99**

\*INC £150 CASHBACK (until 18/10/16)

#### EF 70-200mm F/2.8 L IS USM MK II

Superb fast-aperture sports/portrait mid telezoom. SRP £1799.99

**£1749.99**

\*INC £150 CASHBACK (until 18/10/16)

#### EF 24-105mm F/4 L IS II USM

Superb new full-frame standard zoom with upgraded optics and anti-shake.

**£1129.99**



**£150 CASHBACK**  
from Canon UK  
Ends 18/10/16



**£150 CASHBACK**  
from Canon UK  
Ends 18/10/16



#### EF 16-35mm F/2.8 L III USM

New full-frame super-wide zoom with upgraded optics - f/2.8 aperture for superb low-light performance.

**£2349.99**

**HUGE CANON LENS, PRINTER & ACCESSORY RANGE IN STOCK!**



**EOS M3**  
+ 18-55MM MIS STM & EVF-DC1 VIEWFINDER KIT

**£499.99**

+ FREE personalised Neckstrap from Canon UK!

#### EOS M10 + 15-45MM MIS STM

**£289.99**

+ FREE personalised Neckstrap from Canon UK!



**1ST STOCK OCT!**



**55-200MM IS STM**  
only £199.99  
when bought with M3



**55-200MM IS STM**  
only £199.99  
when bought with M10



**CANON EOS PROFESSIONAL CENTRE**

**FINANCE AVAILABLE**  
Credit Finance available on most items over £300 retail (in-store & online)  
Ask for details.  
(via V12 Retail Finance Ltd).

**WE PAY CASH**  
for good quality camera equipment.  
Phone, email or call in with your equipment!

**FAST COURIER MAIL ORDER** Next day delivery available from all LCE branches. Postage & Insurance £4.99 for most items.

Browse, check offers & shop at: [www.LCEgroup.co.uk](http://www.LCEgroup.co.uk)

Info & Order Enquiries **Tel: 02380 632629**

Email enquiries to: [southampton.civic@LCEgroup.co.uk](mailto:southampton.civic@LCEgroup.co.uk) Manager – Matthew Sanders - BA (Hons) Photography

See us on Facebook: [www.facebook.com/LondonCameraExchangeSouthamptonCivic](http://www.facebook.com/LondonCameraExchangeSouthamptonCivic)

E & O E. Subject to availability. Some images are for illustrative purposes only. Trade-Up deals are examples only and assume equipment part-exchanged in very good condition, full working order, etc. & including all standard accessories.







### Distance scales

Most manual-focus lenses include distance and depth of field scales to help with focusing.

### Compact size

Manual-focus lenses can often be made smaller than similarly specified autofocus designs.

# Take manual control

Why would you choose to use manual-focus lenses? **Andy Westlake** looks at the advantages and examines various manual-focus brands on the market

Once upon a time, focusing was a real problem in photography. With unsharp, out-of-focus images usually consigned straight to the dustbin, various ingenious mechanisms were invented to help photographers make sure they weren't wasting film. More experienced readers will fondly remember optical rangefinders, ground-glass focus screens and split prisms with microprism collars. All were designed to ensure that the image the lens projected onto the film would be properly sharp, and all required some skill and experience on the part of the photographer for them to be used correctly.

Then came autofocus. Like all new technologies, various ideas flourished briefly and then got lost by the wayside, such as active ultrasonic or infrared focusing systems. Film cameras finally settled on passive phase-detection measurements before digital brought us contrast-detection and various hybrid methods. Now, most people carry a camera all the time that can identify and focus on a subject far more reliably than any film camera of old – and it's built into a





## 'Manual-focus lenses can be made sharper, or as they are simpler, they can be cheaper – or even both'

➤ device that's notionally a telephone. Indeed, AF has now got so good that various recent systems to allow refocusing after the event, such as Lytro's light field cameras and Panasonic's 4K post focus, all seem to have missed the boat – it's a solved problem.

So with that in mind, why would anybody choose to buy a manual-focus lens? With DSLRs that can keep track of speeding racing cars and mirrorless marvels that can identify and focus not just on your subjects' faces, but specifically their eyes, isn't it just being wilfully awkward?

### The manual focus advantage

As it happens, there are still good reasons to buy manual-focus lenses. The first are to do with the technical constraints autofocus places on lens design. Photographers demand autofocus to be fast, accurate and quiet, and in practice this means lenses have to use relatively small, lightweight focus groups that can be driven quickly into position by a built-in motor. Not only does this hugely increase the mechanical complexity, but it can also compromise absolute sharpness. Manual-focus lenses, however, have no such constraints. So they can be made sharper, or, as they are simpler, they can be cheaper – or even both at once.

The second main reason isn't technical, but aesthetic. By racking a lens through its range of focus while observing the subject in the viewfinder, the photographer gets to choose what looks best, rather than the camera, and sometimes that may produce an unexpected image. Indeed, as the celebrated Victorian photographer Julia Margaret Cameron once said of her distinctive style: 'When focusing and coming to something which, to my eye, was very beautiful, I stopped there instead of screwing on the lens to the more definite focus which all other photographers insist upon.'

With this in mind, over the next two pages I'll round up the various manual-focus lens brands on the market. I'll be specifically concentrating on lenses for stills photography, rather than those made with video predominantly in mind. Alongside familiar names such as Zeiss and Samyang, I'll also be covering up-and-coming brands including Irix and Laowa. This isn't a list of specific lenses – instead, it's intended more as an introduction and a starting point for further research.

AP

## Irix

● [www.irixlens.com](http://www.irixlens.com)

SWISS-BASED Irix is a young company that unveiled its first products earlier this year. At the moment it's offering only a 15mm f/2.4 full-frame wideangle, but unusually in two different versions with identical optics, called Blackstone and Firefly. The cheaper Firefly uses lightweight plastic construction with a rubber focusing ring, while the Blackstone has a premium magnesium-alloy barrel with an anti-scratch finish, engraved markings that use fluorescent paint for visibility in low light and better weather sealing. Both lenses come in Canon, Nikon and Pentax mounts, and offer fully automated aperture control from the camera.

Shared features include a proper depth of field scale, an infrared focusing mark, a rear holder for gel filters and a lens hood with a sliding window to allow easier use of polarising filters. Most unusual, though, is a focus-lock ring, which you could use to fix

focus at the hyperfocal distance for landscape work, for example. There's even the ability to calibrate the focus ring for the very best accuracy. All these features show real attention to detail and an appreciation of what photographers actually need. Irix is clearly a company to watch, and we're looking forward to seeing more products that are expected to emerge at the Photokina trade fair this month.

**This 15mm f/2.4 is the first in the Irix line, and has just started shipping**



## Samyang

● [www.samyanglensglobal.com](http://www.samyanglensglobal.com)

OVER the past five or six years, Samyang has built up a strong reputation for making optically excellent manual-focus prime lenses at keen prices. Some of its lenses are optimised for full-frame DSLRs, some for APS-C DSLRs and others for APS-C

mirrorless, so it's important to know exactly what you're getting (unfortunately, Samyang's lens-naming scheme doesn't make this clear). It also repackages all its photo lenses into video-friendly barrel designs, with clickless apertures marked in T-stops and geared control rings for use in rig set-ups. Recently, it has launched its first autofocus lenses, designed for the Sony Alpha 7 range.

Samyang's DSLR lenses now include automatic aperture setting from the camera and full electronic compatibility, so they are pretty straightforward to use, although with the caveat that most DSLR viewfinder screens aren't very good for focusing manually. In contrast, its lenses for CSCs are rather simpler, with direct aperture setting from an on-lens ring and no electronic communication with the camera.

We've certainly been very impressed by those we've tested recently, and they're a great way of experimenting with slightly exotic optics such as fisheyes and fast primes without breaking the bank.



**Samyang makes a range of primes with excellent optics and at very competitive prices**



## Laowa

• [www.venuslens.net](http://www.venuslens.net)

LAOWA is one of the first optical companies from mainland China to start selling lenses to a wider audience. It's concentrated on making optics with unique features, so that it's not in direct competition with more-established third-party lens makers. There's a 60mm f/2.8 macro for APS-C that offers twice-life-size 2:1 magnification; a 15mm f/4 macro with 1:1 magnification, alongside a shift function for use with APS-C cameras; and a 105mm f/2.8 Smooth Trans Focus portrait lens with a built-in apodisation filter for smoothly blurred out-of-focus backgrounds. New in the line-up is a 12mm f/2.8 Zero-D wideangle prime, which Laowa claims has minimal curvilinear distortion. The lenses



Laowa's lenses are generally competitively priced

are available in Canon, Nikon, Sony and Pentax SLR mounts, along with Sony E-mount versions aimed at Alpha 7 users.

We've reviewed the first three Laowa lenses and found that they all have something to recommend them, but they have their quirks too. There's no electronic aperture control, and this complicates using them with the optical viewfinders of DSLRs. However, they do work well in live view, and adapt well for use on mirrorless cameras.

## Leica

• [uk.leica-camera.com](http://uk.leica-camera.com)

LEICA has developed an enviable reputation for the quality of its lenses, and with very good reason, as they are superb both optically and mechanically. While Leica's M-mount manual-focus lenses are designed to be used on its rangefinder cameras, they can also be adapted for use on mirrorless models and are particularly interesting for users of the Sony Alpha 7 range. However, the short registration distance means they can't be used on DSLRs.

Broadly speaking, Leica's lenses can be split into two types. Currently it has nine premium, high-speed optics, and 13 compact lenses with more modest maximum apertures. There's also the unique 16-18-21mm f/4 Tri-Elmar, which in effect is a wideangle zoom with three click-stopped focal-length settings. All its lenses have steep price tags to match their optical quality.

The fast primes, and the

stunning 50mm f/0.95 and 90mm f/2 in particular, can give great results on mirrorless models as they can be focused more reliably using magnified live view, compared to using a rangefinder. However, the wideangle primes tend to be less satisfactory, as they can suffer from smearing and colour-shading effects in the corners of the frame that are difficult to fix in post-processing.



Leica's stunning M-mount lenses can be adapted for use on CSCs

## Voigtländer

• [www.voigtlaender.com](http://www.voigtlaender.com)

WHILE Voigtländer is a famous German name, it's now a brand for the Japanese optical specialist Cosina and used for four ranges of manual-focus primes. Alongside a pair of SL-II lenses for Nikon DSLRs (40mm f/2 and 58mm f/1.4), it makes 14 primes in Leica M mount ranging from 10mm to

75mm. Three of these (10mm f/5.6, 12mm f/5.6 and 15mm f/4.5) are also available in Sony E mount for use on Alpha 7 models, including electronic communication with the camera so that the magnified view can be engaged when the focusing ring is turned.

Micro Four Thirds users, meanwhile, get a set of four ultra-fast f/0.95 primes, with focal lengths of 10.5mm, 17.5mm, 25mm and 42.5mm. All four of these feature aperture rings that can be switched between clicked modes for photography, and de-clicked for video.

In terms of price, Voigtländer occupies the middle ground between Samyang and Laowa's value offerings and premium brands such as Leica and Zeiss. Unfortunately, though, most of the lenses aren't all that easy to find, with just the most popular readily available in the UK.



Voigtländer makes a Nokton range of f/0.95 lenses for Micro Four Thirds

## Zeiss

• [www.zeiss.co.uk/camera-lenses](http://www.zeiss.co.uk/camera-lenses)

ZEISS, like Leica, is one of the oldest names in photography. It mostly makes premium manual-focus primes for full-frame cameras, but also some autofocus designs for mirrorless systems.

Top of the Zeiss range are its no-compromise Otus models, with 28mm f/1.4, 55mm f/1.4 and 85mm f/1.4 lenses currently available. Huge and heavy, these have the kind of optical quality and wide-open sharpness you'd expect from their stratospheric price tags (£2,700-£3,630). More accessible to mere mortals are its Milvus lenses, with focal lengths from 21mm to 100mm and prices from £830-£1,380. These lenses are all made for Canon and Nikon DSLRs only, and provide stunning image quality.

Zeiss also makes a range of ZM primes in M mount, which tend to be more affordable than Leica's own offerings. As usual, these can be used on mirrorless camera via

mount adapters, although again, wideangles may not work so well. However, two ZM lenses, the 35mm f/2 and 50mm f/2, provide the optics for the first two lenses in the Loxia range of manual-focus Sony E-mount primes, and have recently been joined by an all-new 21mm f/2.8. These are all designed to be small and discreet, with aperture rings that can be de-clicked for movie use.



Zeiss's lenses provide stunning image quality at a premium price



# SIGMA

Introducing SIGMA's second APS-C format zoom lens offering a large F1.8 aperture throughout the zoom range.

## **A** Art **50-100mm F1.8 DC HSM**

Petal type lens hood and padded case included.  
Available for Sigma, Canon and Nikon AF cameras.  
**Made in Japan**



**Mount Conversion Service**  
Change your mind? Change your mount.  
Mount Conversion Service. Only by SIGMA.





Sigma's MC-11 allows Canon EF lenses to be used on Sony E-mount cameras. This image was shot with the EF 100mm f/2 USM on the Alpha 7R II

# Sigma Mount Converter MC-11 Canon EF-E

Thinking of switching from a Canon DSLR to a Sony Alpha 7-series camera? If you are, the **Sigma MC-11** adapter may have just made things a little easier for you. **John Huxley** puts it to the test

With class-leading full-frame sensors, excellent video capabilities and a compact design, the Sony Alpha 7 series of cameras has grown from strength to strength in the few years since its release. However, one of the criticisms of the system is its lens line-up. The past year has seen some notable additions to the growing Sony FE lens range, including a 50mm f/1.4, a 24-70mm f/2.8 and a 70-200mm f/2.8, and although most popular focal lengths are now covered, there are still a few gaps. Then there is the cost.

Sony markets itself as a premium brand, and its FE lenses come at a premium price, particularly when compared to Nikon and Canon optics. In fact, one of the many reasons

DSLR users state for not switching to the Sony Alpha 7 series is the lens line-up. It can be an expensive affair swapping all that Canon or Nikon glass for the equivalent Sony lenses. Third-party manufacturers have started to take note of this, and Samyang, Zeiss and Voigtlander now make full-frame Sony E-mount lenses. Of course, there is another option, and that is to use a lens adapter to allow DSLR lenses to be mounted on an Alpha 7 camera, but the huge compromise here is that autofocus will be severely limited, or simply not possible at all. That is, until Sigma announced the MC-11 lens adapter.

Sigma is said to be working on full-frame E-mount lenses, but it has used its knowledge of both the Sony E mount and the Canon EF

mount to develop a lens adapter that allows full AF functionality when using current Sigma lenses on Sony E-mount cameras (including the older NEX and Alpha 6000 series, plus, of course, the latest Sony Alpha 7-series cameras). However, to get the most from the adapter and lenses, it is best to combine them with an Alpha 7R II, Alpha 7 II or Sony Alpha 6300, all of which have fast hybrid on-sensor phase-detection autofocus. The promise is that the Sigma lenses should focus just as quickly as a native lens and camera combination.

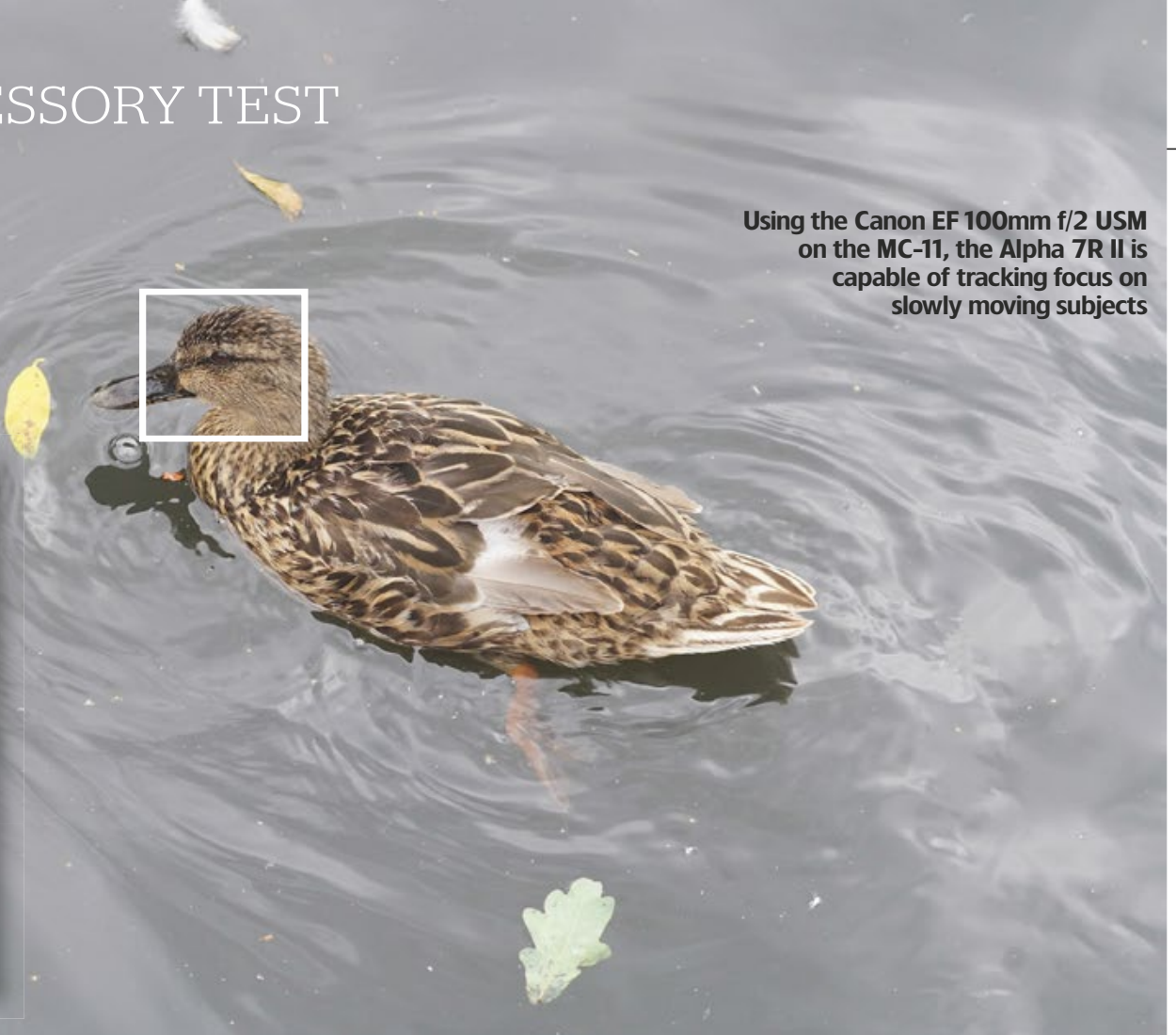
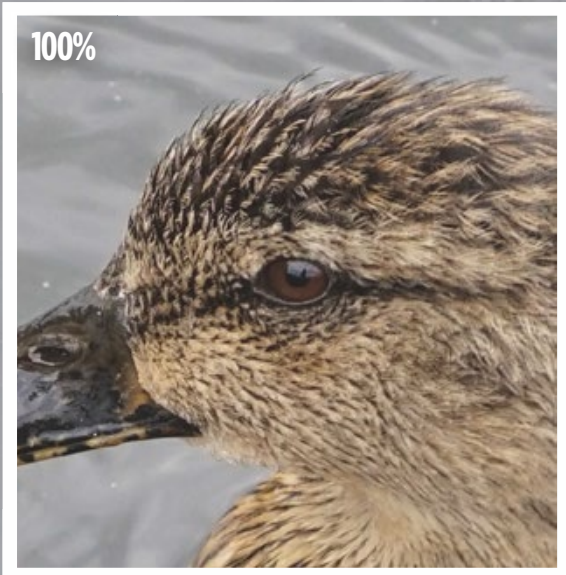
This isn't the first adapter of this kind, as Metabones offers a similar product. However, at £219 the Sigma MC-11 is much cheaper than the £350 Metabones adapter, and with good distribution channels it should also be easier to get hold of one.

We have previously tested Canon lenses on a Sony Alpha 7R II using the Metabones adapter and found that while it produces acceptable results for general subjects, the results can be a little hit and miss for very fast-moving subjects. Sigma guarantees full AF functionality





Using the Canon EF 100mm f/2 USM on the MC-11, the Alpha 7R II is capable of tracking focus on slowly moving subjects



with nine of its 35mm full-frame lenses, and a number of its APS-C lenses, but the real question is what happens when you put a lens on it that isn't listed as being compatible? What exactly does happen when you put a Canon lens on the adapter? If the lenses work and focus with accuracy and speed, then one of the final stumbling blocks to stop Canon users switching to Sony may have been overcome.

### Build and handling

At first glance there isn't much to see with the Sigma MC-11. There is no glass here, and instead you are essentially buying an electronic adapter tube. But don't be fooled, as there is plenty going on. To start with, there are Canon EF-mount and Sony E-mount electrical contacts at the ends of the adapter. Clever electronic processing takes place inside to convert the camera-lens communications data from a Sony-compatible format to a Canon-compatible format, and vice versa.

It is important to note that the Sigma MC-11 isn't a cheap adapter such as the type that can be purchased on eBay. It is exactly what you would expect from the current Sigma offerings. It feels like a premium-quality product that is well built, and nicely flocked on the inside to prevent internal light reflections. The mounts fit both the camera and lens snugly, with a reassuring click confirming everything is locked properly in place. Importantly, the adapter has a micro USB socket that will allow for its firmware to be updated in the future, to make it compatible with future cameras and lenses.

On the side of the MC-11 is a small LED that indicates the compatibility of the lens you are using. A green light means full compatibility, while a blinking amber light means that the lens is compatible but requires a firmware update. No light at all means that the lens isn't compatible, but exact what 'not compatible' means is what we really wanted to find out.

Sigma's own 50mm f/1.4 DG HSM Art lens behaves very well on the MC-11





‘It feels like a premium quality product that is well built, and nicely flocked on the inside’

Performance

Sigma provided us with a Canon-mount 50mm f/1.4 DG HSM Art lens to test the MC-11 and overall we were pleased with the performance. This lens isn't the fastest to focus – it has some large, heavy lens elements. However, when mounted via the adapter on a Sony Alpha 7R II, it works as if it were a dedicated Sony FE lens. All the AF modes were available for selection, including continuous AF, focus tracking and face detection. While continuous focusing worked with moderately moving subjects, it wasn't especially fast. It was quick enough to track a walking person, or slowly moving wildlife, but more erratic, faster movements did cause it to lose focus, and sometimes have to hunt to recover.

What about older, non-compatible Sigma lenses? Well, an older Sigma 28-70mm f/2.8 EX DG struggled. Its ageing focusing motor made some slightly disturbing noises and hunted back and forth with some very exaggerated movements. At one point a flashing warning symbol also appeared on the screen of the Alpha 7R II. In this case it is clear that the lens really isn't compatible, and as it is a lens that is about 20 years old this shouldn't be too much of a surprise.

We had slightly more success with a Sigma 17-35mm f/2.8-4 EX DG HSM lens. In Single AF mode set to centre point it was quick to focus on distant subjects, but hunted more for those closer to the camera.

As Sigma can't guarantee compatibility with proprietary Canon lenses, they obviously can't advertise the fact that these lenses work surprisingly well with the MC-11 adapter. Using an older Canon EF 100mm f/2 USM lens I found the performance was excellent. With no official compatibility the LED on the side of the adapter failed to light up, but the lens whirred into life, quickly snapping into focus in single AF mode as fast as it would do on a Canon DSLR, or as if you were using a dedicated Sony lens. There was a bit of hunting in lower-contrast light, but for 90% of users I would say that the performance of this lens would be almost on a par with using the lens on a Canon DSLR.

It was a similar tale when using a first-generation Canon EF 50mm f/1.8. Again, the lens performs some sort of start-up calibration as it whirs through the focus range when you first mount it. After this, the late 80s lens snapped quickly into focus and if you didn't know you could easily think it was a proprietary Sony lens.

When using a Canon EF 70-300mm f/4-5.6 IS USM lens the first thing to note is that the image stabilisation can be heard whirring away and seems to work as expected. The in-camera stabilisation menu of the Alpha 7R II was also greyed out, so Sigma has apparently managed to avoid any conflict between the two systems. I used the lens at 300mm, in single-shot AF mode to photograph a distant heron, and with the Alpha 7R II firing a continuous burst of images the lens had no difficulty focusing, snapping just as quickly as if it were a proprietary set-up. Like the other lenses, it did, on occasion, act a little more sluggishly when photographing subjects closer to the minimum focus distance.

As a matter of interest I mounted the MC-11 adapter on to the original Sony Alpha 7 camera, which only has contrast-detection AF, rather than the phase-detection hybrid system of the Alpha 7R II. Although noticeably slower, the Sigma 50mm f/1.4 DG HSM Art lens focused at a steady speed and very smoothly – it is certainly usable. It wasn't quite the same case for non-compatible lenses. The other lenses would suddenly burst into life, go past the point of focus, shunt back, then creep forward until the precise point of focus was found. Yes, it worked, but in all honesty it would have been quicker to manually focus.

Sadly, we didn't have a Metabones adapter to do a side-by-side comparison to see exactly just what the differences are, but anecdotally I feel that the Sigma adapter reacts quicker and is more consistent in its operation. With the lenses we tried the Sigma adapter isn't perfect, but was close to it with the Sigma 50mm f/1.4 DG HSM Art lens, and with the Canon lenses it offers an acceptable solution.



Sigma's 50mm f/1.4 DG HSM Art fitted to the Sony Alpha 7R II using the MC-11 mount converter

Our verdict

WITH a working knowledge of both the Canon EF and Sony E mount, Sigma has managed to provide a solution that will enable photographers with Sigma Canon-mount lenses to use them on Sony Alpha 7 cameras. But it isn't just Sigma lenses that work, as Canon's own lenses also work almost as if they are native Sony lenses.

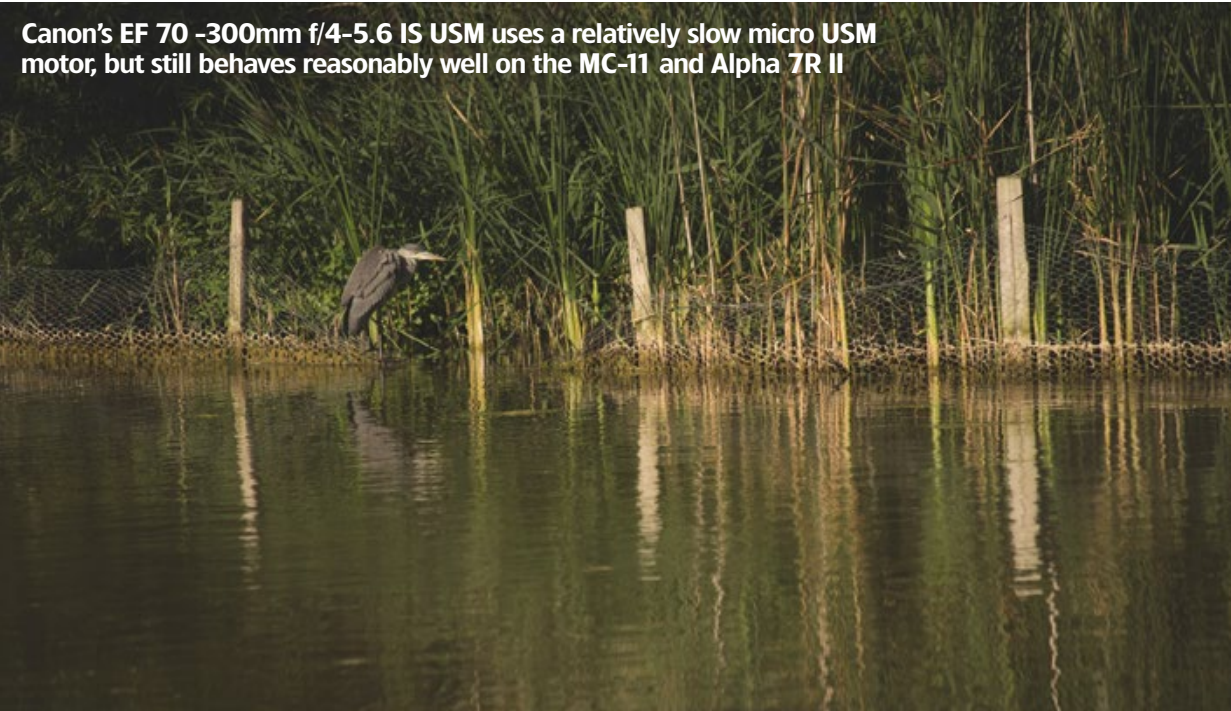
Things aren't perfect. As we have seen with the Metabones adapters, continuous autofocus does provide more of a challenge. Sigma lenses perform adequately for most general uses, while the Canon lenses we tried were a little sluggish, and the older Sigma lenses were virtually unusable, but this is largely down to the slower motors that they employ.

For the vast majority of Canon users thinking of switching to the Sony Alpha 7R II or Alpha 7 II, the Sigma MC-11 adapter should make the switch almost seamless. The caveat is that you shouldn't expect continuous autofocus to work at its full potential, so if your passion is photographing birds in flight, sports or similar fast-moving subjects, you will be better off sticking to either Canon DSLR cameras or Sony lenses. For landscape, documentary, portrait, and most other types of images, the Sigma MC-11 should be more than adequate.

Amateur  
Photographer  
Testbench  
Recommended  
★★★★

Compatible Sigma lenses

35mm full-frame	APS-C
24-35mm f/2 DG HSM   A	17-70mm f/2.8-4 DC MACRO OS HSM   C
24-105mm f/4 DG OS HSM   A	18-35mm f/1.8 DC HSM   A
120-300mm f/2.8 DG OS HSM   S	18-200mm f/3.5-6.3 DC MACRO OS HSM   C
150-600mm f/5-6.3 DG OS HSM   S	18-300mm f/3.5-6.3 DC MACRO OS HSM   C
150-600mm f/5-6.3 DG OS HSM   C	50-100mm f/1.8 DC HSM   A
20mm f/1.4 DG HSM   A	30mm f/1.4 DC HSM   A
24mm f/1.4 DG HSM   A	19mm f/2.8 DN   A
35mm f/1.4 DG HSM   A	30mm f/2.8 DN   A
50mm f/1.4 DG HSM   A	60mm f/2.8 DN   A
	30mm f/1.4 DC DN   C



Canon's EF 70-300mm f/4-5.6 IS USM uses a relatively slow micro USM motor, but still behaves reasonably well on the MC-11 and Alpha 7R II



Don't Miss London's **BIGGEST** Camera Hobby Show!

THE  
**cameraWORLD**  
SHOW LONDON 2016

GRAND CONNAUGHT ROOMS, LONDON WC2B 5DA  
SATURDAY 29TH OCTOBER 2016 | 11AM-5PM  
**FREE ENTRY**



**See & Try the Latest Products • Talk to the Experts • Exclusive Show Deals**  
**Photo Demonstrations • Competitions • Seminars • Workshops • Photo Walks**

**Canon | Nikon | Fujifilm | Sony | Olympus | Panasonic**

360Fly | 4V Design | Ansmann | Benro | Cactus | Cokin | Crumpler | Datacolor  
Domke | Gillis London | Hoya | Impossible | Isaw | Joby | Lexar | Lowepro | Mefoto  
Rotolight | Samyang | Sigma | Sirui | Tamron | Tenba | Tiffen | Vanguard | Velbon | Zeiss

**Second Hand Shop • Bring & Buy • Extra Part-Exchange Offers**

More Information at: [www.cameraworld.co.uk/theshow](http://www.cameraworld.co.uk/theshow)

Photo by Arpad Lukacs | CameraWorld London. Information subject to change without notice. E. & O.E.



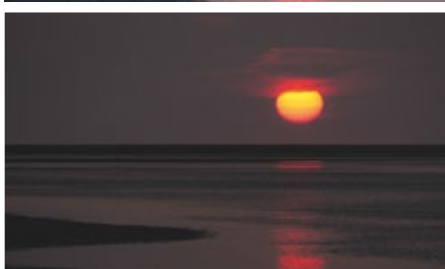
# TechSupport

Email your questions to: [apanswers@timeinc.com](mailto:apanswers@timeinc.com), **Twitter** @AP\_Magazine and #AskAP, or **Facebook**. Or write to Technical Support, Amateur Photographer Magazine, Time Inc. (UK), Pinehurst 2, Pinehurst Road, Farnborough Business Park, Farnborough, Hants GU14 7BF

© JULIA BURLEY



© JULIA BURLEY



The image above was photographed 2 stops darker than the brighter, less colourful one (top)

## Bleached-out sunsets

**Q** I have a Sony Cyber-shot DSC-HX200V camera and I want to take sunset pictures. I have tried all the settings that I thought would be suitable but nothing works – the sunset part of the picture has no colour in it. **Mrs L Thurston**

**A** It sounds like the problem is that the sun is too bright for the camera setting, thus bleaching out the golden tones you are seeking. The solution is to force the camera to underexpose the scene. In theory your Sony HX200V should be able to intelligently recognise the scene type and alter the exposure automatically to suit. Try either Intelligent or Superior auto modes. If this doesn't work, you can try using the camera's exposure compensation adjustment to darken the scene or by using the Photo Creativity mode to do the same. The latter should be able to let you optimise the colour and saturation as well. **Ian Burley**

## Printing to the edge

**Q** I'm a member of the Bognor Regis U3A Digital Camera Club. Some of our members have inkjet printers that

are not capable of printing an image to the edge of A4 print paper. We are now aware some printers have software drivers or a mechanical design that makes this impossible to work around, but when we show our images at club meetings to create a more level playing field we ask members to print to the edge of A4. Do you know of any list of manufacturers and their model numbers, lacking this print ability from today back to 2008 and available to download from the internet? **David Lloyd**

**A** It would be a monumental task to create a definitive database of the hundreds or thousands of inkjet printer models that have been produced over the past eight years that are certified as being able to print without borders. Some printers do and some don't, while others will when printing certain media sizes – often only 10x15cm (6x4in), for example. The simplest solution would be to allow for some minor trimming to produce borderless prints. Or could the club buy a printer that fitted the bill that all could use? **Ian Burley**

## Wobbly video

**Q** I have started to experiment with the video mode on my Olympus E-5 DSLR. I am enjoying recording clips of birds on the feeder using my 70-300mm lens. However, I do occasionally verge on feeling seasick as sometimes the result exhibits a rather weird roly-poly wobble effect. Is this normal? **Dan Shipley**

**A** Video has been around on still digital cameras for a long time, but the effect you have noticed came to the fore with the proliferation of MOS-type camera sensors. It's officially known as the 'rolling shutter' effect. Traditionally, digital cameras have used CCD (Charged Couple Device) sensors.



The Olympus Trip 35 is a point-and-shoot model with a 40mm f/2.8 lens and just two shutter speeds

## Olympus Trip red flag

**Q** I have recently inherited an Olympus Trip 35 35mm film camera in good condition, but when I attempt to use it on automatic a red flag appears preventing me from using the shutter. Is this a job for a repairman or is it something I'm doing wrong? **Pat Whelan**

**A** The camera is designed to be used on automatic (A setting) unless you use an attached flash. The red flag in the viewfinder normally indicates that the exposure range has been exceeded; it's either too bright or too dark. If you are sure that you aren't trying to trip the shutter in abnormal light, then it's likely that the selenium meter is faulty. If you feel ambitious you can remove the top-plate of the camera to inspect the mechanism, which consists of a small galvanometer needle moving according to the brightness sensed by the selenium cell. If the needle moves freely then the mechanism it is linked to could be stuck. It may simply need cleaning. Skilled and determined Trip enthusiasts have successfully fixed problems like this. Alternatively, common advice is simply to find a replacement camera that works as they are very inexpensive. **Ian Burley**

With CCDs the most common way to extract a video frame is via a 'global shutter'. The entire contents of the sensor is saved in one action before recording the next frame. With MOS-type sensors, including the LiveMOS-branded sensor in your E-5, it's usual for global shutters to be replaced by 'rolling' shutters. The frame data in a rolling shutter is read off row by row while rows previously read can quickly start recording light once more. A rolling shutter means the sensor

can be more sensitive, but if the data can't be read off the sensor fast enough then action scenes, especially where there are major movement changes, exhibit that wobbling jelly effect.

This unwanted effect has been steadily eroded as MOS sensor designs have improved and much faster data read-out frequencies have been implemented. Unfortunately, there is nothing that can be done to solve this wobble effect. **Ian Burley**



# FREE 28-PAGE GUIDE TO SHOOTING VIDEO

## Master Video WITH YOUR DSLR

BROUGHT TO YOU BY THE MAKERS OF  
THE **VIDEO MODE** In association with **Canon**

### LEARN HOW TO...

- Stabilise your camera
- Record better audio
- Master focusing & exposure

**+  
21**

### EXPERT TIPS

Our essential guide to  
making better videos

**MORE THAN  
£10,000  
IN PRIZES  
TO BE WON!**

In our Amateur  
Filmmaker  
of the Year  
competition



Visit [www.thevideomode.com/guide](http://www.thevideomode.com/guide)  
to download your free copy today!





BOTH PICTURES © STUART LOW

# I can't live without...

Stuart Low reveals why the Weston Master V handheld exposure meter is his vital accessory



Stuart has been a landscape photographer for more than 30 years. He is the founder and head judge of the Scottish Landscape Photographer of the Year competition. Visit his website at [www.stuartlowphotography.co.uk](http://www.stuartlowphotography.co.uk).

## Weston Master V

THE Weston Master V is a classic handheld exposure meter that was produced in Britain from 1963–1972. Stuart has used it for more than 30 years for both digital and film photography.

'I shoot landscapes almost exclusively on film using classic medium and large-format cameras,' says Stuart. 'The cameras I generally use don't have in-built meters, so my Weston exposure meter is a must-have if I am to get an image at all. But even when I shoot digital, I prefer to use my Weston because it provides me with an intimate connection

with the scene that I tend not to get when using a camera with an integrated meter.

'The tendency to stick the camera on a tripod, stand back from the scene and let the camera do the work means an average exposure for the entire scene. For me, this is lazy photography, and ultimately it makes for mediocre images. When I use my Weston, I need to get close to objects around the scene in order to take highlight and shadow readings. When in close, I can smell things and see textures more clearly and this can shape how I want to take



Stuart's image of Lochbuie on the Isle of Mull metered with his trusty Weston Master V

the image. Do I want to bring out detail or close it off, for example? It's also a lot more interesting because you learn an awful lot more about our natural world and that makes for a more interesting photograph.'

### FACT FILE

#### Weston Master V

**Price** While the Weston Master V meter is no longer made, examples can be picked up on eBay for £10–£25. Stuart recommends buying the separate inverter for incident metering.



Collectable Cameras
Simon & Julie Chesterman

4x5 120mm f6.8 Schneider Angulon lens.....	£99	Minox model B, subminiature for 8x11 with case & chain .....	£59
4x5 Graflex 120 roll holder, 6x9 on 120 works, small repair.....	£25	Nikon AF 35-80 f4.5-5.6 D F Nikkor. VGC .....	£29
Adox Adrette, (Wirgin Edinex), with f3.5 Steinheil Cassar .....	£29	Nikon AF-D 75-240 f4.5-5.6 D Zoom Nikkor nr mint boxed .....	£49
Agfa Isolette III 6X6, f4.5 Apotar in Prontor, nr mint boxed.....	£39	Nikon AH-3 tripod mount adaptor. VGC.....	£19
Agiffex II outfit; 80, 160 & 240 lenses, all nice plus extras.....	£199	Nikon F5 Due In x2, .....	Call
Balda Baldina, 35mm crf. 2.9 Radionar / Prontor SVS.....	£25	Nikon FG body / Chrome. Good condition, fully working.....	£39
BPM Bellows outfit: with Bellows, Focuslide, loads of bits .....	£49	Nikon FG-20 body. Chrome. VGC, fully working. New seals.....	£49
Bronica EC / S2A etc fit set of ext tubes. Nr mint boxed .....	£25	Nikon FM2, FA, FM, D1X al due in .....	Call
Bronica EC / S2A etc fit Vivitar MC 2X teleconverter.....	£29	Nikon Lite Touch Zoom 70WS AF zoom compact camera.....	£19
Bronica ETR / S / Si 150mm f3.5 MC lens. Near Mint, hood .....	£79	Nikon Macro Speedlight SB-21, with F3 power pack AS-12.....	£89
Bronica ETR / S / Si 150mm f3.5 MC lens. VGC.....	£69	Nikon Macro Speedlight SB-21, with power pack AS-14.....	£69
Bronica ETR / S / I / C Plain 90 degree prism finder.....	£29	Nikon MC30 remote release.....	£15
Bronica Macro Bellows, to suit EC, S2a etc. VGC .....	£49	Nikon Non Ai 135mm f3.5 Nikkor Q lens. Scalloped, VGC.....	£39
Bronica S2A roll film holder. Silver. 6x6 on 120/220.....	£29	Nikon non Ai 200mm f4 Nikkor Q lens. Scalloped, VGC.....	£49
Brooks Plaibel Veriwide, 6x9, 47mm Super Angulon .....	£799	Nikon non Ai 21mm f3.8 Soligor wide angle lens. VGC.....	£89
Canon AE-1 body, chrome. VGC and working well.....	£39	Nikon non Ai 28mm f2.5 Vivitar lens VGC, Excellent quality.....	£35
Canon Canonet 28, with 40mm f2.8 Canon lens. VGC.....	£49	Nikon non Ai 50mm f1.4 Nikkor S lens. Nippon Kogaku.....	£89
Canon EF 35-70mm f3.5-4.5 Mk 1 lens. VGC with caps.....	£29	Nikon non Ai 85mm f1.8 Nikkor H lens. Scalloped, VGC.....	£199
Canon EF body. Overall VGC and working well.....	£29	Nikon Speedlight SB-24, in VGC + case SS-24 .....	£25
Canon FD 100-200mm f5.6 S.C. zoom lens. Vgc .....	£29	Olympus Mju 1 AF compact, 35mm f3.5 Zuiko boxed .....	£29
Canon FD 35-70mm f4 lens, Near mint, boxed, with caps .....	£29	Olympus OM black real leather ever ready case. VGC.....	£29
Canon FD 80-200mm f4 FD bayonet lens.....	£29	Olympus OM fit 135mm f2.8 Vivitar Macro lens VGC .....	£129
Canon FD fit 400mm f5.6 Sigma Telephoto lens Grey finish .....	£69	Olympus OM fit 90mm f2.8 Vivitar Macro lens VGC .....	£139
Canon FD fit 70-300mm f4.5-5.8 Carl Zeiss Jenazoom II .....	£29	Olympus OM lens to 4/3 body adaptor. Near mint condition .....	£15
Canon LTM (39 screw) 13.5cm f4 Serenar lens. c.1948.....	£59	Olympus OM soft case, to suit OM bodies .....	£12
Canon Sure Shot Z135. Metal bodied AF zoom compact .....	£25	Olympus OM T10 macro ring flash, with T Power Control 1.....	£79
Carl Zeiss Jenaflex AC-1 (Praktika bayonet) + 50/f1.8.....	£39	Olympus OM T32 flash, Nice example, working well .....	£29
Changing bag, like new, small-medium size.....	£15	Olympus OM Winder 2. Good condition working well .....	£29
Contax / Yashica fit Macro Bellows. Nice set, in VGC.....	£29	Olympus OM-10 body, a very clean example working well .....	£25
Contax / Yashica Metz SCA 380 adaptor excellent .....	£19	Olympus OM2-n, chrome, with 50mm f1.8 Zuiko lens.....	£59
Contax 139 winder, VGC.....	£25	Olympus Pen EE-3 half frame, with 28mm f3.5 Zuiko lens .....	£29
Contax 167MT + Tokina SD 28-70mm f3.5-4.5 Zoom lens .....	£79	Panasonic DMC-LZ7 digital compact camera, mint boxed.....	£25
Contax TLA-30 flash. Excellent condition with Pouch .....	£35	Pentax fit Pentacon Magnifying angle finder. V Nice.....	£19
Coronet Camera. Rare outfit for children with developing kit .....	£49	Pentax K7 DSLR, with 18-55 SMC Pentax DA lens, boxed .....	£229
Coronet Vogue bakelite folding camera. For 127, with case .....	£59	Pentax KA 28-80mm f3.5-4.5 Zoom lens. ....	£29
Darkroom Schneider 50mm f4 Componon lens. Nr mint box .....	£39	Pentax KA 35-70mm f3.5-4.5 SMC-A zoom lens. V nice.....	£29
Darkroom: 50mm f2.8 Rodenstock Rodagon lens. Excellent .....	£39	Pentax KA 70-210mm f2.8-4 Vivitar Series 1 lens. VGC.....	£49
Ensign Cupid camera. Charming and unusual camera .....	£49	Pentax LX FE-1 Waist Level Magni-Finder. Near Mint.....	£69
Ensign Ensignette, No.1 Aluminium model. Good condition .....	£25	Pentax LX System Finder FB-1+ Action Eyepiece FC-1 .....	£79
Ensign Ensignette, No.2 Aluminium model. Good condition .....	£29	Pentax P30, with 50mm f2 SMC Pentax-A lens. Excellent.....	£49
Ensign Folding Rollfilm camera, Postcard size and VGC.....	£29	Pentax Ref Converter, right angle finder, fits SV, S1a etc.....	£29
Ensign Midget, model 33. VGC with slip case.....	£39	Petri Flex fit 28mm f3.5 Petri CC Auto lens. Scalloped .....	£29
Ensign Selfix 820. 6x9 or 6x6 on 120. 105/3.8 Ross Xpres .....	£79	Pic Camera, rare British camera from the 1950s, 127 film.....	£59
Epson Stylus Photo R3000 A3 printer + lots of A3 paper.....	£329	Praktica / Schneider BX20s, SLR body As New Boxed.....	£59
Fed 3, crf camera for 35mm, with 52mm f2.8 N-26m lens.....	£39	Praktica / Schneider BX20s, with Databack. As New Boxed.....	£65
Fed type 1a / 1b Transitional model, Serial number 7099. + 50/3.5 .....	£29	Praktica Bayonet Macro Bellows 961 335 / Slide Copier 961 .....	£39
Fed lens no.6955. Mid 1935. Rare, call for details .....	£299	350 set. Beautiful quality, mint condition, boxed.....	£39
Fuji M42 mount 75-150mm f4 Fujinon-Z zoom lens. Lovely.....	£29	Praktika Bayonet Macro Focus slide 961 344 mint, boxed.....	£29
Gossen Sixtar 2 meter, Late all black model. In VGC .....	£29	Praktica BMS, bayonet SLR, with 50mm f2.4 pancake lens.....	£20
Gossen Lunasix 3 meter, in grey finish. VGC with case.....	£29	Praktiflex SLR, 1946 version. With 5cm Vicitar lens.....	£49
Hasselblad fit 2x Converter, Vivitar, Near mint, cased.....	£49	Ricoh Mate CRF for 35mm. With 45/ f2.8 Riken lens. mint .....	£39
Hasselblad narrow leather neck strap, VGC.....	£19	Riken Steky original model subminiature camera, case .....	£89
Hasselblad Pistol grip, suits most F and C models. VGC.....	£25	Rollei 35 LED, black. With 40mm f3.5 Triotar lens.....	£49
Heydes Aktino Photometer, A lovely extinction meter cased.....	£29	Rolleiflex Bay 1 Filters, Yellow, Light Green, Green, Orange, .....	£15
Horseman VH / VH-R lens board, Copal o size .....	£19	Red, Pale Blue. Price Each .....	£15
Horvex 3 light meter. (selenium cell). Super, boxed .....	£19	Rolleiflex Bayonet 1 lens hood in back bakelite keeper, vgc.....	£25
Ilford Advocate MK1 f4.5 Dallmeyer Chrome pressure plate.....	£149	Rolleiflex Bayonet 1 Rolleiinar 1 close up set, lovely, cased.....	£29
ITT Binocular camera. Photo Binocular 110.....	£25	Rolleiflex Bayonet 1 Rolleiinar 2, 3 part close up set, lovely.....	£29
Kiev / Contax fit 135mm f4 Jupiter 11 lens. In silver finish.....	£29	Rolleiflex Bayonet 2 lens hood, near mint, nice quality .....	£25
Kiev / Contax fit 135mm f4 Jupiter-11 lens, silver, keeper .....	£35	Rolleiflex Bayonet 2 Rolleiinar 1 close up set, VG, cased.....	£39
Kiev / Contax fit 85mm f2 Jupiter-9 lens. VGC.....	£79	Russian 8x30 Monocular. Excellent condition .....	£25
Kiev IV a, Type 3. (unmetered) With 53/ f2 Jupiter 8-M lens .....	£49	Russian multi turret finder. Frames for 28, 35, 50, 85, 135 .....	£45
Kirn SF finder. For 135mm frame. (like Voigtlander Kontur).....	£29	Stereo Coronet 3-D stereo bakelite camera, for 127 film.....	£39
Kodak Bantam f4.5 with case, instructions.....	£29	Stereo Coronet 3D camera. Black bakelite. VGC.....	£49
Kodak Beau Brownie. 6X9, black / maroon Very pretty VGC .....	£49	Stereo Realist. 35mm CRF. 35mm f2.8 David White lenses .....	£249
Kodak Beau Brownie. 6X9, black and maroon.....	£39	Stereo Realist. 35mm CRF. 35mm f3.5 David White lenses .....	£99
Kodak Medalist, with 100mm f3.5 Ektar lens, VGC.....	£169	Stereo; Illoca Stereo Rapid. 35mm CRF f35/ f2.8 Cassarits .....	£129
Kodak no.2A brownie in Blue covering. 6.5x11 on 116 VGC.....	£19	Tamron Adaptall 2 mount 28mm f2.5 BBAR MC .....	£25
Kodak Pony 135, french model. 4.5cm f3.5 Angenieux lens .....	£49	Tasco 7800 Binocular camera; (110 camera) VGC, cased.....	£69
Kodak Retina C fit 35mm f5.6 Schneider Curtagon.....	£39	Tasei Welmy Six, for 6x6 on 120. 75mm Terionar lens.....	£35
Kodak Retina Reflex / S mount 135mm f4 Tele Xenar .....	£39	VN Press camera. Strut Folding 4X5, 6" f4.5 Ross Xpres.....	£169
Kodak Retina Reflex fit slide copying set. VGC .....	£19	Voigtlander Kontur finder, for 35mm frame on 24x36 .....	£25
Kodak Retina Sports Finder, VGC cased.....	£25	Voigtlander Bessa 1, for 6x9 on 120. With 105mm Vaskar .....	£69
Kodak Vollandia 620. 10.5cm f4.5 Kodak lens in Compur .....	£29	Voigtlander Bessamatic SLR. + 50mm f2.8 Color-Skopar X.....	£69
Konica AR 28mm f3.5 Hexar AR lens. Super example.....	£19	Voigtlander Prominent fit 150/4.5 Super Dynaron V.Rare .....	£199
KW Praktina FX SLR, wit 58m f2 CZJ Biotar f2 lens.....	£69	Weimarlux light meter, in white, with red case. Works well .....	£15
Leica APDOO self timer accessory. Near mint, boxed .....	£25	Welta Perle camera, 6x4.5 on 120 Radionar lens .....	£29
Leica APDOO self timer accessory. VGC, cased.....	£25		

We are always keen to purchase collections however large or small. Instant decisions and fair prices paid. Please ring us now...



You are welcome to visit our showroom to browse our huge collection - please ring us before travelling for an appointment



Leica Bakelite keeper for 9cm Elmar lens. Pre War. VGC.....	£19	Weston Euro Master light meter. VGC, case, invercone .....	£49
Leica BOOWU copy stand. Pre war VGC with scruffy box.....	£39	Weston Master III, exceptional set, with invercone, case.....	£29
Leica FIKUS variable lens hood. For A36 Elmar lenses .....	£29	Weston Master V meter, VGC case, cone, lanyard .....	£39
Leica FISON lens hood for 5cm Elmar. Satin chrome boxed .....	£49	Wirgin Edinex, with 4.5cm f2 Xenon lens in Compur Rapid .....	£59
Leica FOKOS chrome rangefinder, post type, no foot .....	£49	Wirgin Edinex, with 5cm f2.8 Steinheil Cassar in Compur .....	£35
Leica Illic - IIIf ever ready case. VGC, with 3/8 screw .....	£39	Wirgin Reporter, for 3x4 on 127film. 5cm f2.9 Fixanar lens.....	£49
Leica L39 35mm Elmar fit lens hood. Nice vintage, not LeitZ.....	£15	Yashica Bayonet 1 Close Up Set No.2, for TLR use .....	£19
Leica L39 screw mount 35mm f2.8 Jupiter-12 lens. Silver .....	£49	Yashica D TLR, VGC with Brown covering, working well.....	£79
Leica L39 screw mount 50mm f2 Jupiter-8 lens. Silver .....	£25	Zeiss Icarex fit 35mm f2.8 'Icarex BM Wide Auto' Japan.....	£29
Leica M / Screw Telemore 2x converter + finder mint, box .....	£149	Zeiss Ikon "Baby Box" Tengor. For 3x4 on 127 film.....	£19
Leica POODL yellow no.2 filter for 9cm Thambar boxed .....	£25	Zeiss Ikon "Baby Ikonta" 520/18, 5cm f3.5 Zeiss Tessar.....	£59
Leica POODW Green filter for 9cm Thambar lens boxed .....	£25	Zeiss Ikon Balduz Box, 51/2. 6x9 on 120 film. c.1935.....	£25
Leica R Macro Extension tube set no. 14158.....	£25	Zeiss Ikon Chrome Box Tengor, 56/2. 6x9 on 120 film.....	£29
Leica VIDOM zoom viewfinder, chrome 35-135 markings.....	£39	Zeiss Ikon Contessa 35 533/24. 2.8 Opton Tessar .....	£89
Leica VIOOH zoom viewfinder. Straight Sided version.VGC.....	£59	Zeiss Ikon Film cutting template. For Contax, like ABLON.....	£59
Leica WINTU right angled finder. Chrome, VGC .....	£49	Zeiss Ikon Icarette 551/2, convertible for 69 on 120/Plates.....	£29
Macro Focus Film. Pentacon. Very solid and well made.....	£15	Zeiss Ikon Ikonta 35 522/24. Folding 35mm. f3.5 Novar .....	£39
Mamiya 645 120 back for Super / Pro TL. With 120 insert.....	£35	Zeiss Ikon Ikonta 520. 6x4.5 on 120. f3.5 Tessar / Compur .....	£39
Mamiya 645 210mm f4 Sekor C lens. Near Mint, boxed.....	£99	Zeiss Ikon Ikonta 521. 6x6, 7.5cm f3.5 Novar in Compur.....	£39
Mamiya 645 fit Vivitar MC 2x Teleconverter. Near mint.....	£29	Zeiss Ikon Ikonta 521/16. 6x6 7.5cm f3.5 Novar in Compur.....	£39
Mamiya 645 Right Angle Finder, to suit 645 prism finders .....	£29	Zeiss Ikon Ikophot light meter. VGC and working well .....	£29
Mamiya 645 Super motor wind accessory, works well.....	£39	Zeiss Ikon Nettar 515/2, for 6x9 With 11cm f4.5 lens.....	£25
Mamiya C330 Professional body. Good / Used condition .....	£99	Zeiss Ikon Super Ikonta C 530/2. 6x9. 10.5/4.5 Tessar .....	£99
Mamiya medium format Pistol Grip Fits below camera .....	£19	Zeiss Super Ikonta D 530/15. 6.5x11 on 616, Lovely .....	£119
Minolta AF 28-85mm 3.5-4.5 Zoom lens w/caps .....	£49	Zenit L39 screw SLR mount 135mm f4 Jupiter 11 lens.....	£25
Minolta AF 35-105mm f3.5-4.5 Zoom lens. nice quality .....	£49	Zenith 80, 6x6 SLR. Nice cased set.....	£129
Minolta Auto Winder G, Near mint condition, boxed, case .....	£25	Zorki C (Zorki S). With 5cm f3.5 Industar 22 lens.....	£39
Minolta Hi-Matic G. Zone focus 35mm compact, 38mm f2.8 .....	£19		
Minolta X-300 body, silver. VGC and working well .....	£35		
Minolta X-700, X-300 case CH-3 Boxed.....	£12		
Minox CD 25 APS compact camera. 25/4 Minoctar lens.....	£19		

Many More items at: www.collectablecameras.com
Insured P&P usually between £3 and £11.
MILL HOUSE. BARMBY ON THE MARSH. EAST YORKSHIRE. DN14 7HQ
Tel: 01757 638649 (10am-7pm) Mobile: 07970 630287
Email: sales@collectablecameras.com



Mail order specialists. Visitors welcome by appointment.

WANTED FOR CASH
Exclusively... Nikon
HIGHEST PRICES PAID
Grays of Westminster are always seeking mint or near-mint examples of Nikon equipment:
Nikon cameras, AF-D Nikkor lenses, AF-S Silent Wave Nikkor lenses, AF Micro-Nikkor lenses, Nikon Speedlights, Nikkor AIS & AI Manual Focus Lenses
Please telephone 020-7828 4925 or you can email us at info@graysofwestminster.com for our highest offer.
Grays of Westminster - Exclusively... Nikon
40 Churton Street, Pimlico London SW1V 2LP
www.graysofwestminster.co.uk

CHISWICK Camera Centre
Call us 020 8995 9114
E-mail us sales@chiswickcameras.co.uk
www.chiswickcameras.co.uk

HUGE RANGE OF USED EQUIPMENT IN STOCK - UP TO DATE WEBSITE.



BEST PRICES PAID - USED PURCHASES
PART EXCHANGE & COMMISSION SALES
ALL OF OUR USED EQUIPMENT IS FULLY TESTED & GUARANTEED

4 Chiswick Terrace, Acton Lane, Chiswick, London W4 5LY
50 Meters from Chiswick Park tube station - Customer parking available
Part-exchange welcome - Established over 53 years
OPENING HOURS
9.30AM-6PM
MON - SAT





## Professor Newman on...

# Determining depth of field

Professor Newman looks at depth of field from the standpoint of what happens in front of the lens

**T**his article is the first of a series of three in which I'll try to develop some common elements of photographic theory considering only that which occurs in front of the lens. The motivation for this is to try to remove much of the technical detail, which often provides dead ends when thinking about the basic photographic principles. In the diagram below the lens aperture or entrance pupil is shown to the right, with diameter A. Emerging from it is the angle of view that is being captured, denoted by  $\theta$ . In reality this will be determined by the sensor frame size and the focal length of the lens, but since that happens 'behind' the lens, for this discussion how the angle is affected is irrelevant. For this discussion about depth of field (DoF) we add the blue lines, showing the path of light rays to the extremes of the

**'Typically, the circle of confusion is sized to be about 1/1,500th of the image diagonal'**

aperture from an object at O, on which we assume the lens is focused. The blue dashed lines show how the rays from an object in front of the plane of focus (denoted by the fine dotted black line) have the appearance of a disc at the plane of focus. Similarly, the blue dotted lines illustrate that the rays from an object behind the plane of focus form a similar disc.

For the purposes of determining DoF, we need to first decide how large a disc we wish to allow as a 'point'. Normal DoF theory calls this the 'circle of confusion', but its position is at the image plane, not the plane of focus. Following Harold Merklinger's (of *The Ins and Outs of Focus* fame) lead, I will call its conjugate at the plane of focus the 'disc of confusion'. The most

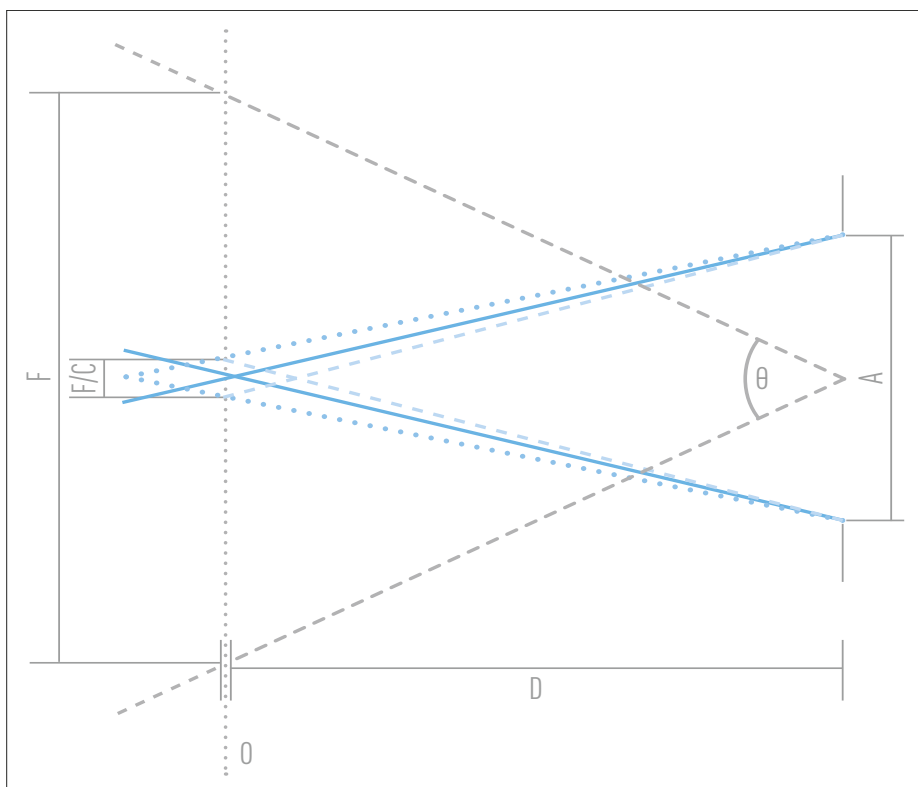
sensible way to define the size of this disc is relative to the field of view – that is, how large it will appear in the final image. Typically, the circle of confusion is sized to be about 1/1,500th of the image diagonal, so we might choose the disc of confusion to be a similar proportion of the field of view.

The advantage of this way of going about DoF is that it is no longer necessary to choose a circle of confusion appropriate to sensor size and intended viewing size – instead, we simply choose, as a proportion of the final image, what we will consider to be sharp enough. Further, it dispels the mistaken view that DoF is to do with what happens behind the lens and makes it completely format independent. All that is necessary is to know the angle of view and the aperture diameter.

For the more technically inclined, we can now derive the DoF equations using this 'in front of camera' perspective. Using the usual distant object approximations and the laws of similar triangles, we can derive the following:

For a point of focus at distance D from the aperture and a disc of confusion which is a fraction of the field of view C, then the extent of DoF in front of the plane of focus is  $D / (CA/2 \tan \theta + 1)$  while the extent behind is  $D / (CA/2 \tan \theta - 1)$ . While I'm not expecting people to replace the traditional DoF formula with these, it is interesting that they can be derived with no reference to what occurs behind the aperture, so in this form the DoF is format independent. All that is required is to decide what proportion of the field of view is allowable as a 'disc of confusion'.

## 'In front of camera' view of depth of field



Objects slightly behind or in front of the plane of focus, as indicated by the dotted and dashed blue lines, will be acceptably sharp in print

**Bob Newman** is currently Professor of Computer Science at the University of Wolverhampton. He has been working with the design and development of high-technology equipment for 35 years and two of his products have won innovation awards. Bob is also a camera nut and a keen amateur photographer

## Amateur Photographer

The latest photography kit and technique at your fingertips



More great pictures  
More technique  
More opinion  
More inspiration

- Download online, enjoy offline
- Buy from the comfort of your own home
- Available the day the magazine goes on sale
- Missed an issue? Simply download a back copy

**Try it today**

[www.amateurphotographer.co.uk/digital-edition](http://www.amateurphotographer.co.uk/digital-edition)





# Marketplace

## Dealer and Classified Guide

To advertise please call 01252 255344

Email [tommy.sullivan@timeinc.com](mailto:tommy.sullivan@timeinc.com)

### Index to advertisers

Anthropics Technology Ltd ..... 12	Grays of Westminster..... 26-27, 66	Richard Caplan Photographic Ltd ..... 73
Camera World..... 62	Intro 2020 Ltd ..... 36	Sigma Imaging (UK) Ltd..... 58
Chiswick Camera Centre ..... 66		Sony Europe Limited ..... Cover: ii
Clifton Cameras..... 11	London Camera Exchange Ltd..... 54	Srb-Griturn Ltd..... 25
Collectable Cameras ..... 66		
Dale Photographic Ltd..... 69	MPB Photographic..... 80	Worldwide Cameras Exchange Ltd..... 68
		Warehouse Express.....70-72
EISA .....Cover:iv	Palm Laboratory (Midlands) Ltd ..... 68	
	Park Cameras ..... Cover:iii,74-75	
Ffordes Photographic Ltd.....76-77	Permier Ink & Photographic .....78-79	

**Classified ..... 80-81**



## Equipment to sell?

Great news! The global market for quality digital and film cameras, lenses and accessories is stronger than ever!

With our worldwide network of customers we're paying the highest prices for **Nikon, Canon, Leica, Fuji, Contax, Olympus, Panasonic, Sony, Zeiss, Voigtlander, Konica, Minolta, Sigma, Tamron, Tokina, Hasselblad, Pentax, Bronica, Mamiya** and other top-quality brands.

### Free Collection

Contact Jonathan Harris for an immediate quote:  
[info@worldwidecameraexchange.co.uk](mailto:info@worldwidecameraexchange.co.uk)  
 or phone 01277 631353

### Same-day Payment

Looking to buy? Please visit our website:  
[www.worldwidecameraexchange.co.uk](http://www.worldwidecameraexchange.co.uk)

## Palm Labs Photographic Processing & Printing

Palm Laboratory Ltd  
 69 Rea Street  
 Birmingham B5 6BB

Established 30 Years



- **Kodak & ILFORD** Film now in stock
- E6 / Slide / C41 / Neg / B&W Film Processing
- Process & Print Packages on Kodak Paper
- Digital Package Deals on Kodak Paper
- 35mm / 120 / 5x4 / 10x8 Film's
- Traditional Black & White on Ilford Paper
- Optical Colour Handprints on Kodak Paper
- Drum & Whole film Scanning Services
- Exhibition Prints on Kodak Paper
- Digital C-type Print's on Kodak Endura
- Portfolio's and Student Discounts
- Lomography Prints and Scans
- Mounting Services ● Metallic / Gloss / Matt Paper
- Friendly Advice ● Postal Service

**0121 622 5504**

[www.palmlabs.co.uk](http://www.palmlabs.co.uk)  
[info@palmlabs.co.uk](mailto:info@palmlabs.co.uk)



# Canon Professional Dealer

**EOS 5D MKIV In Stock, EOS 5Ds, 5DsR, 5D MK3, 7D II**  
**We stock most of the L series Lenses**

Canon Virtual Kits Offer	Phone	EOS 760D Body	£569	TS-E 24mm f3.5L II	£1,479	85mm f1.8 USM	£279
EOS 1DX II - In Stock	£5,199	EOS 1300D + 18-55 IS II	£339	TS-E 17mm f4L	£1,589	85mm f1.2L II	£1,769
EOS 5D Mk IV Body	£3,599	8-15mm f4 L Fisheye	£999	70-200mm f2.8 L IS II	£1,699	100mm Macro f2.8	£425
EOS 5D III Body	£2,299	10-18mm f4.5-5.6 IS	£212	70-300mm f4-5.6 IS	£419	100mm Macro f2.8 L IS	£659
EOS 5Ds Body	£2,699	11-24mm f4 L	£2,649	70-300mm f4-5.6 L IS	£1,049	300mm f4 L IS	£999
EOS 5DsR Body	£2,899	16-35mm f4 L IS	£769	135mm f2L	£769	300mm f2.8 L IS II	£5,495
EOS 7D MkII	£1,179	16-35mm f2.8 L II	£1,249	100-400mm f4.5-5.6L NEW	£1,799	400mm f4 DO IS II	£6,995
EOS 6D	£1,299	17-40mm f4 L	£549	200-400mm f4 L IS 1.4x	£8,699	400mm f2.8 L IS II	£7,698
EOS 80D body	£979	17-55mm f2.8 IS	£629	28mm f2.8 IS	£399	500mm f4 L IS II	£6,995
EOS 80D + 18-55 IS STM	£1,088	24-70mm f4 L IS	£742	24mm f1.4 L II	£1,395	600mm f4 L IS II	£8,895
EOS 80D + 18-135 STM	£1,299	24-70mm f2.8 L II	£1,549	35mm f2 IS	£399	800mm f5.6 L IS	£11,295
EOS 750D + 18-55 STM	£579	24-105mm f4 IS	£852	35mm f1.4L II	£1,799	1.4x III f314 2xIII Extender	£329
		70-200mm f4 IS	£949	50mm f1.4	£269	600EXII-RT Speedlite	£529
		70-200mm f4L	£529	50mm f1.2L	£995		

**Nikon**

# Professional Dealer

**Beat the price rise!! Nikon D5 and D500 cameras NOW IN STOCK - UK STOCK**  
**D5 - D810 - D750 - D500 - D7200 - D5500 - LENSES - FLASHGUNS - ACCESSORIES**

NIKON PRO DEALER		D5500 + AF-P18-55 VR	£649	70-300mm f4.5-5.6 VR	£479	200mm f2 G ED VR II	£4,599
2 YEAR UK WARRANTY		D5500 + 18-140mm	£759	80-400mm f4.5-5.6 AFD VR	£1,799	300mm f2.8 G VR II	£4,649
D5 Body - In Stock	£5,199	D3400 + AF-P18-55 VR	£489	200-500mm f5.6E ED VR	£1,179	400mm f2.8 FL ED VR	£9,699
D500 Body - In Stock	£1,729	10-24mm f3.5-4.5 DX	£639	20mm f1.8 G	£629	500mm f4E FL ED VR	£8,149
D810	£2,139	14-24mm f2.8G	£1,459	24mm f1.4 G	£1,529	600mm f4E FL ED VR	£9,649
D810 + 24-120mm f4	£2,999	16-35mm f4 VR	£869	28mm f1.8 G	£495	800mm f5.6 FL VR+TC1.25	£13,995
D810 + 24-70mm f2.8	£3,499	16-80mm f2.8E VR	£849	35mm f1.8 G ED	£399	PC-E 24mm f3.5	£1,499
D810 + 14-24mm f2.8	£3,549	18-35mm f3.5-4.5	£599	35mm f1.4 G	£1,499	PC-E 45mm f2.8	£1,399
D750	£1,595	18-140mm f3.5-5.6 VR	£439	50mm f1.8 G	£179	2x TC-20 E III Converter	£379
D750 + 24-120mm f4	£2,249	18-200mm f3.5-5.6 VR II DX	£549	50mm f1.4 G	£369	1.4x TC-14 E III Converter	£429
D610	£1,299	18-300mm f3.5-5.6 VR DX	£799	58mm f1.4 G	£1,349	SB5000 Speedlight	£429
D610 + 24-85mm VR	£1,599	24-70mm f2.8E ED VR	£1,829	85mm f1.8 G	£429	SB700 Speedlight	£229
D7200 Body	£799	24-120mm f4 VR	£899	85mm f1.4 G	£1,289	SB-R1C1 Commander	£555
D7200 + 18-105mm VR	£999	28-300mm f3.5-5.6 VR	£729	NEW 300mm f4 EPF ED VR	£1,449	SU-800 Commander Unit	£299
D7100 Body	£679	70-200mm f2.8 VR II	£1,799	105mm f2.8 Micro VR	£629	Nikon SB-300	£99
D7100 + 18-105mm VR	£879	70-200mm f4 VR	£1,079	105mm f1.4E ED	£2,049	UK STOCK	UK STOCK

**Hasselblad**

New Hasselblad X1D-50C  
Mirrorless camera - Pre Order with a 10% Deposit

New X1D-50C + 45mm	£8,976
New X1D -50C	£7,188
New H6D - 100c	£27,120
New H6D - 50c	£21,480
H5D-50c	£12,714
H5D-50c Wi-fi EX DEMO	£10,995
CFV-50c Digital Back	£6,995

See our Website for full list of Hasselblad lenses and accessories

**ZEISS**

Canon/Nikon Fit Lenses	
OTUS 55mm f1.4	£2,799
OTUS 85mm f1.4	£3,019
OTUS 28mm f1.4	£3,630
15mm f2.8	£2,069
21mm f2.8 Milvus	£1,169
25mm f2	£1,188
28mm f2	£899
35mm f2 Milvus	£745
35mm f1.4	£1,346
50mm f1.4 Milvus	£854
50mm f2 Milvus	£949
85mm f1.4 Milvus	£1,379
100mm f2 Milvus Macro	£1,299
135mm f2	£1,599
Zeiss Binoculars - 10 Year Warranty	
8x32 Conquest HD	£589
10x32 Conquest HD	£627
8x42 Conquest HD	£699
10x42 Conquest HD	£738
8x42 Victory HT	£1,449
8x42 Victory SF	£1,820

S (type 007) Body	£11,995
S-E Body + 70mm S Lens	£7,995
M-P (type 240) Silver/Black	£5,064
M (type 240) Silver/Black	£4,650
SL body + 24-90mm	£7,995
Monochrom (type 246) Black	£5,249
M (262) Black	£3,995
T body + 23mm Lens	£2,049
X body + 18-56mm Lens	£1,949
X-U Camera	£2,200
Q Camera	£3,199
X (type 113) Silver/Black	£1,299
X-E (type 102)	£999
D-Lux (type 109)	£749
V-Lux (type 114)	£799
New 28mm f2 and 28mm f2.8 Phone	

See Website for full list of Leica lenses and accessories

<b>Leica</b> SPORT OPTICS	
8x20 Monovid	£339
8x20 Trinovid BCA	£334
10x25 Trinovid BCA	£375
8x20 Ultravid BR	£510
10x25 Ultravid BR	£535
8x20 Ultravid BL (Leather)	£561
10x25 Ultravid BL (Leather)	£578
8x32 Ultravid HD - Plus	£1,350
10x32 Ultravid HD - Plus	£1,375
New 8x42 Trinovid HD	£745
New 10x42 Trinovid HD	£789
8x42 Ultravid HD	£1,399
Monovid	£339
7x42 Ultravid HD-Plus	£1,399
8x42 Ultravid HD-Plus	£1,449
10x42 Ultravid HD-Plus	£1,499
10x50 Ultravid HD - Plus	£1,575
12x50 Ultravid HD- Plus	£1,665

**FUJIFILM**

X-T2 Body - Pre Orders taken	£1399
X-Pro2 Body	£1349
X-T1 Body	£799
X-T1 + 18-55mm	£1049
X100T Silver/Black	£794
X-T2 + 18-55mm	£1649
XF 35mm f2	£369
XF 16-55mm f2.8 R LM WR	£959
XF 10-24mm f4 OIS	£829
New XF 23mm f2 - To Order	£419
XF 50-140mm f2.8 OIS	£1,329
XF 100-400 OIS WR	£1,579
XF 14mm f2.8	£789
XF 16mm f1.4 R WR	£829
XF 23mm f1.4	£789
XF 60mm f2.4 R	£579
XF 56mm f1.2	£829
XF 90mm f2 R LM WR	£829

See website for full listing

**SWAROVSKI**

8X25 Pocket CL Green/Black	£504
10X25 Pocket CL Green/Black	£540
8x32 EL Field Pro	£1,475
10x32 EL Field Pro	£1,495
8.5x42 EL Field Pro	£1,800
10x42 EL Field Pro	£1,820
10x50 EL Field Pro	£1,935
12x50 EL Field Pro	£1,955
8x42 EL Range W B	£2,195
10x42 EL Range W B	£2,268
ATX 30-70x95 Spotting Scope	£2,870
ATX 25-60x85 Spotting Scope	£2,600
ATX 25-60x65 Spotting Scope	£2,150
ATS 80 -HD Angled + 25-50x scope	£1,999
ATS 65 -HD Angled + 25-50x scope	£1,539

**EVENTS @ DALE PHOTOGRAPHIC**

Tuesday the 16th August 2016 -  
Fuji X-T2 Demo Day 10am - 4pm

Tuesday the 13th September 2016 -  
Hasselblad X1D Demo Day 10am - 4pm

**SIGMA**

Nikon/Canon Fit (3 Year warranty)

8-16mm f4-5.6 DC	£499
17-50mm f2.8 DC OS	£279
10-20mm f3.5 DC	£329
12-24mm 4.5-5.6 DG MKII	£529
17-70mm f2.8-4 DC C	£279
18-35mm f1.8 DC Art	£549
18-250mm f3.5-6.3 DC	£279
18-300mm f3.5-6.3 DC C	£349
24-35mm f2 DG Art	£699
24-105mm f4 DG Art	£599
50-500mm f4.5-6.3 DG	£849
70-200mm f2.8 DG	£729
150-600mm f5-6.3 DG C	£739
150-600mm f5-6.3 DG S	£1,199
35mm f1.4 DG Art	£599
50mm f1.4 DG Art	£579
24mm f1.4 DG Art	£599
20mm f1.4 DG Art	£629
105mm f2.8 Macro DG	£329

**Manfrotto**

190XPRO3	£159	494RC2	£46
190XPRO4	£169	496RC2	£57
190CXPRO3	£299	498RC2	£79
190CXPRO4	£299	460MG	£299
055XPRO3	£179	804RC2	£57
055CXPRO3	£359	MHXPRO-3W	£109
055CXPRO4	£374	410 Geared	£153
Befree Alu	£149	MVH502AH	£105
Befree Carbon	£279	MVH500AH	£122

Free monopod with carbon tripods

**3 Legged Thing**

Roger Evo3	£249	PUNKS	
Brian Evo3	£299	Vyv Evo3	£129
Jack	£249	Rick Evo3	£179

**INDURO**

<b>Stealth Series Carbon Fibre Tripods:</b>			
CLT004	£180	CTL303	£269
CLT103	£189	CLT303L	£295
CLT104	£207	CLT304L	£315
CLT203	£245	CLT403	£342
CLT204	£260		

<b>Grand Series Stealth Carbon Fibre Tripods:</b>			
GIT303	£387	GIT304L	£432
GIT304	£399	GIT305L	£449
GIT404L	£486	GIT504L	£540
GIT404XL	£499		

**Heads**  
BHD0 £98/BHD1 £115/BHD2 £129/BHD3 £153  
BHL1 £175/BHL2 £224/BHL3 £262/GHB2 £349

**BOWENS**

1000Pro 2 Head	£1566	500R 3 Head Kit	£1437
750Pro 2 Head	£1253	500R 2 Head Kit	£895
500Pro 2 Head	£1139	500C 2 Head Kit	£857

See full range of Bowens softboxes, stands and other accessories on our website

**Profoto**

B1 TTL Air Head	£1,632	B1 2 Head kit	£3,500
Air Remote TTL	£312	B2 To Go kit	£1,495
B1 Location Kit	£3,060	B2 Location kit	£1,994

Full list of Accessories available on our website:  
HR and Rfi Softboxes, umbrellas, reflectors, grids and kits



“Love Wex. You can always be reassured you’re going to get great service and a great item at the best price. Thanks ”  
*S. Pradham – Essex*

**THE WEX PROMISE:** Over 17,000 Products | Free Delivery on £50 or over\*\* | 30-Day Returns Policy<sup>†</sup>



**D610** From **£1299**

D610 Body **£1299**  
D610 + 24-85mm **£1699**



**D750** From **£1699**

D750 Body **£1699**  
D750 + 24-85mm **£2099**  
D750 + 24-120mm **£2299**



**D500** Body **£1799**

New D500 Body **£1799**  
New D500 + 16-80mm **£2479**



**D810** From **£2399**

D810 Body **£2399**

Read our D810 review on our blog at [wex.co.uk/blog](http://wex.co.uk/blog)

## The new Nikon D5 – A flagship power

Equipped with Nikon’s incredible next-generation 153-point AF system, the D5 keeps you on track whether you’re shooting the race or the red carpet. Coverage is exceptionally wide, and a new buffer allows up to 200 NEF (RAW) images to be captured during one high-speed burst. New image and metering sensors deliver phenomenally accurate subject recognition and image detail. The highest expanded sensitivity in Nikon’s history frees you to shoot from bright sunlight to astronomical twilight. And for moviemakers who go to extremes, D-Movie now enables high-definition 4K/UHD movies to be recorded in-camera.

New D5 Body **£5299**



New D5 Body **£5299**

For 2-year warranty on any camera and lens kit simply register your new Nikon within 30 days of purchase. Offer applies to UK & Republic of Ireland stock only. Call 0800 597 8472 or visit [www.nikon.co.uk/register](http://www.nikon.co.uk/register)



**A7R II** **£2999**

A7R II Body **£2999**  
A7S II Body **£2899**  
A7R Body **£1199**  
A7 II Body **£1349**  
A7s Body **£1799**



**A6300** From **£1069**

New A6300 Body **£1069**  
New A6300 + 16-50mm **£1249**  
A6000 Body **£419**  
A6000 + 16-50mm PZ **£499**



**A68** From **£549**

A68 Body **£549**  
A68 + 18-55mm **£629**  
A77 II Body **£999**  
A77 II + 16-50mm **£1399**  
A58 + 18-55mm + 55-200mm **£449**

### RECOMMENDED FULL FRAME E-MOUNT LENSES:

New Sony FE 85mm f1.4 G ..... **£1649**  
New Sony FE 24-70mm f2.8 G ..... **£1999**  
Sony FE 24-70mm f4.0 ZA OSS ZA Vario-Tessar Carl Zeiss T\* ..... **£899**  
Sony FE 70-200mm f4.0 G OSS ..... **£1249**

### RECOMMENDED A-MOUNT LENSES:

Sony 70-400mm f4-5.6 G SSM II . **£1999**  
Sony 70-300mm f4.5-5.6 G SSM . **£689**  
Sony 28-75mm f2.8 SAM ..... **£599**  
Sony 35mm f1.8 DT SAM ..... **£149**

## Panasonic



**GH4R** From **£999**

GH4R Body **£999**  
**£949 Inc. £50 Cashback\***



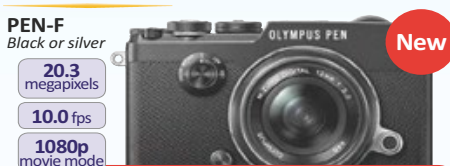
**GX8 + 12-60mm** **£869**

GX8 + 12-60mm **£869**  
**£819 Inc. £50 Cashback\***

### RECOMMENDED LENSES:

Panasonic 14-45mm f3.5-5.6 ..... **£229**  
Panasonic 100-300mm f4.0-5.6 LUMIX G Vario ..... **£378**  
Panasonic 45-175mm f4.0-5.6 LUMIX G X Vario ..... **£279**  
Panasonic LUMIX 45-150mm f4.0-5.6 ASPH OIS ..... **£199**

## OLYMPUS



**New PEN-F** From **£999**

New PEN-F from **£999**  
OM-D E-M1 Body **£849**  
OM-D E-M1 + 12-50mm **£969**  
OM-D E-M1 + 12-40mm **£1199**  
OM-D E-M5 II Body **£749**  
OM-D E-M5 II + 12-40mm **£1299**  
OM-D E-M5 II + 12-50mm **£849**

### RECOMMENDED LENSES:

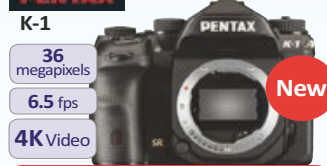
Olympus 75mm f1.8 ..... **£620**  
Olympus 12-40mm f2.8 Pro ..... **£719**  
Olympus 40-150mm f2.8 Pro ..... **£1099**



**E-M10 II** From **£449**

OM-D E-M10 II Body **£449**  
OM-D E-M10 II + 14-42mm **£549**  
OM-D E-M10 + 14-150mm II **£549**

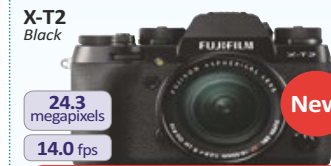
## PENTAX



**K-1** From **£1599**

New K-1 Body **£1599**  
K-3 II Body **£709**  
K-3 II + 18-55mm **£789**  
K-3 II + 18-135mm **£1009**  
K-3 II + 16-85mm **£1099**  
K-50 from **£389**  
K-52 from **£469**

## FUJIFILM



**X-T2** From **£1399**

New X-T2 Body **£1399**  
New X-E2S Body **£549**  
New X-E2S + 18-55mm **£749**  
X-T1 Body **£795**



**X-Pro2** From **£1349**

New X-Pro2 Body **£1349**  
X-T10 Body **£449**  
X-T10 + 18-55mm + 55-200mm XF **£949**

### FUJINON LENSES

90mm f2 R LM WR XF ..... **£669**  
16-55mm f2.8 R LM WR ..... **£849**  
100-400mm f4.5-5.6 R LM OIS WR + 1.4x teleconverter ..... **£1499**





**Wex Showroom**  
Unit B, Frenbury Estate  
Off Drayton High Road,  
Norwich. NR6 5DP.  
Open from 10am daily.

**visit [wex.co.uk](http://wex.co.uk)**  
**01603 208761**  
Call us Mon-Fri 8am-7pm, Sat 9am-6pm, Sun 10am-4pm

**THE WEX PROMISE:** Part-Exchange Available | Used items come with a 12-month warranty<sup>††</sup>

**Canon** | **PRO**  
PARTNER

## Pursue perfection – The new EOS 5D Mk IV

From the darkest shadow to the brightest highlight, a 30-megapixel CMOS sensor captures fine detail even in the toughest conditions, with a maximum native sensitivity of ISO 32,000. Shoot Dual Pixel RAW files for post-production adjustments like you've never seen before.

New 5D Mk IV Body £3599

30.4 megapixels 7.0 fps Full Frame CMOS sensor

**Canon** | **PRO**  
PARTNER  
EOS 760D

24.7 megapixels  
5.0 fps  
1080p movie mode

**760D** Body £549

760D Body £549  
750D Body £529  
750D + 18-55mm £579  
750D + 18-135mm £759  
700D Body £399  
700D + 18-55mm IS STM £449

**Canon** | **PRO**  
PARTNER  
80D

24.2 megapixels  
7.0 fps  
1080p movie mode

**NEW 80D** From £999

New 80D Body £999  
New 80D + 18-55mm £1049  
New 80D + 18-135mm £1299  
70D Body £698  
70D + 18-55mm f3.5-5.6 IS STM £799

CUSTOMER REVIEW: EOS 70D + 18-135mm IS STM  
★★★★★ 'An excellent step up'  
Adam - Portsmouth

**Canon** | **PRO**  
PARTNER  
EOS 7D Mk II

20.2 megapixels  
10.0 fps  
1080p movie mode

**7D Mk II** Body £1179

7D Mark II Body £1179

**Canon** | **PRO**  
PARTNER  
EOS 6D

20.2 megapixels  
4.5 fps  
1080p movie mode  
Full Frame CMOS sensor

**6D** Body £1249

6D Body £1249

**Canon** | **PRO**  
PARTNER  
5DS R

50.6 megapixels  
5.0 fps  
1080p movie mode  
Full Frame CMOS sensor

**5DS R** Body £2899

5DS R Body £2899

**Canon** | **PRO**  
PARTNER  
EOS 1D X Mk II

20.2 megapixels  
16.0 fps  
Full Frame CMOS sensor

**1D X Mk II** Body £5199

New 1D X Mk II Body £5199

Read our 1D X Mk II review on our blog at [wex.co.uk/blog](http://wex.co.uk/blog)

**Pre-Loved cameras**  
Quality used cameras, lenses and accessories with 12 months warranty\*  
[www.wex.co.uk/pre-loved](http://www.wex.co.uk/pre-loved)  
\*Excludes items marked as incomplete or for spares

**Tripods**  
**Manfrotto** Imagine More  
GT3542L  
• 178cm Max Height  
• 16cm Min Height  
**Mountaineer Carbon eXact Tripod:**  
GT1532 £499  
GT2542 £599  
GK2542-80QD £599  
GK1542-82QD £829

**Manfrotto** Imagine More  
MT190XPRO3  
• 160cm Max Height  
• 9cm Min Height  
MT190XPRO3 £129  
MT190XPRO4 £139  
MT190CXPRO3 Carbon Fibre £229  
MT190CXPRO4 Carbon Fibre £299  
MT190XPRO3 + 496RC2 Ball Head £139  
MT190XPRO4 + 496RC2 Ball Head £189

**Manfrotto** Imagine More  
**Wex exclusive**  
Befree One Travel Tripod - Red  
• 130cm Max Height  
• 49cm Min Height  
Aluminium Available in Black, Red, and Grey from £99

**JOBY**  
Hybrid GP2B  
• 1000g Max Load  
• 25.7cm Height  
Joby Tripods  
Original £17  
Hybrid £29  
SLR Zoom from £39  
Focus GP-8 from £79

### Flashguns & Lighting Accessories

<b>Canon</b>   <b>PRO</b> PARTNER <b>Speedlites:</b> 430EX III-RT £219 600EX-RT £429	<b>Macrolites:</b> MR-14EX II £499 MT-24EX £749	<b>Nikon</b> <b>Speedlights:</b> SB5000 £429 SB700 £216	<b>Kits:</b> R1 Close-Up £429 R1C1 £579	<b>SONY</b> Flashguns: HVL-F43M £249 HVL-F60M £429	<b>OLYMPUS</b> Flashguns: FL-300R £134.99 FL-600R £279	<b>PENTAX</b> Flashguns: AF 540 FGZ II £349 AF 360FGZ II £249
<b>Meiz</b> Flashguns: 26 AF-1 £79.99 44 AF-2 £115 52 AF-1 £209 64 AF-2 £309	<b>Macro flash:</b> 15 MS-1 £299	<b>SIGMA</b> Flashguns: EF 610 DG ST £89 EF 610 DG Super £119	<b>Nissin</b> Flashguns: i40 £149 Di700 Air £199	<b>SEKONIC</b> Sekonic L-308s £179 Pro 478DR £369	<b>GOSSEN</b> DigiPro F2 £229	
<b>PocketWizard</b> MiniTT1 £165 FlexTT5 £179	<b>Plus III Set</b> £199 <b>PlusX Set</b> £129	<b>5-in-1 Reflector</b> £24.99	<b>3m Background Support</b> £89	<b>Rogue</b> FlashBender2 £31.95 XL Pro Lighting System £84.95	<b>INTERFIT</b> Wall Mounting Kit £61.99 Folding Softbox From £54.99 Reflector Bracket £24.99	<b>Terms and Conditions</b> All prices incl. VAT at 20%. Prices correct at time of going to press. FREE Delivery** available on orders over £50 (based on a 4-day delivery service). For orders under £50 the charge is £2.99** (based on a 4-day delivery service). For Next Working Day Delivery our charges are £4.99**. Saturday deliveries are charged at a rate of £7.95**. Sunday deliveries are charged at a rate of £8.95**. (**Deliveries of very heavy items, N.I., remote areas of Scotland & Ch. Isles may be subject to extra charges. E. & O.E. Prices subject to change. Goods subject to availability. Live Chat operates between 9.30am-6pm Mon-Fri and may not be available during peak periods. *Subject to goods being returned as new and in the original packaging. Where returns are accepted in other instances, they may be subject to a restocking charge. **Applies to products sold in full working condition. Not applicable to items specifically described as "IN" or incomplete (ie. being sold for spares only). Wex Photographic is a trading name of Warehouse Express Limited. ©Warehouse Express 2016.
<b>westcott</b> Omega Reflector £119 Collapsible Umbrella Flash Kit £70	<b>Lastolite</b> Ezybox Speed-Lite 2 £49.95 Ezybox Hotshoe From £89.99	<b>EzyBalance Grey</b> £19.99	<b>Background Support</b> £124.99	<b>TriFlip Kits</b> From £69.99	<b>Urban Collapsible</b> £165	<b>Off Camera flash Cord</b> From £30.99 <b>Tilthead bracket</b> £23.99

\*CASHBACKS are redeemed via product registration with the manufacturer. Please refer to our website for details.  
Showroom: Drayton High Road, (opposite ASDA)  
Norwich. NR6 5DP. Mon & Wed-Sat 10am-6pm, Tues 10am-5pm, Sun 10am-4pm



**THE WEX PROMISE:** Over 17,000 Products | Free Delivery on £50 or over\*\* | 30-Day Returns Policy†

Follow us on Twitter, Facebook, Google+ and Youtube  
for all the latest offers, reviews, news and advice!



**DSLR Lenses**



**CANON LENSES**

EF 20mm f2.8 USM .....	£385
EF 24mm f1.4L II USM .....	£1159
EF 24mm f2.8 IS USM .....	£455
EF 28mm f1.8 USM .....	£359
EF 28mm f2.8 IS USM .....	£389
<b>£314 Inc. £75 Cashback*</b>	
EF 35mm f1.4L II USM .....	£1799
EF 35mm f2 IS USM .....	£399
EF 40mm f2.8 STM .....	£149
EF 50mm f1.2L USM .....	£1129
EF 50mm f1.4 USM .....	£279
<b>£239 Inc. £40 Cashback*</b>	
EF 50mm f1.8 STM .....	£97
EF-S 60mm f2.8 USM Macro .....	£349
EF 85mm f1.2L II USM .....	£1499
EF 85mm f1.8 USM .....	£279
<b>£239 Inc. £40 Cashback*</b>	
EF 100mm f2.8 USM Macro .....	£399
EF 100mm f2.8L Macro IS USM .....	£659
EF 300mm f4.0 L IS USM .....	£999
EF-S 10-18mm f4.5-5.6 IS STM .....	£185
EF-S 10-22mm f3.5-4.5 USM .....	£399
EF 11-24mm f4L USM .....	£2799
EF-S 15-85mm f3.5-5.6 IS USM .....	£579
<b>£504 Inc. £75 Cashback*</b>	
EF 16-35mm f2.8 Mk II USM .....	£1199
<b>New</b> EF 16-35mm f2.8L III USM .....	£2349
EF 16-35mm f4L IS USM .....	£769
EF-S 17-55mm f2.8 IS USM .....	£599
EF-S 18-55mm f3.5-5.6 IS STM Lens .....	£169
EF-S 18-135mm f3.5-5.6 IS STM .....	£319
EF-S 18-135mm f3.5-5.6 IS USM .....	£449
EF-S 18-200mm f3.5-5.6 IS .....	£389

<b>£314 Inc. £75 Cashback*</b>	
EF 24-70mm f2.8L IS USM II .....	£1459
EF 24-70mm f4L IS USM .....	£675
EF 24-105mm f3.5-5.6 IS STM .....	£349
<b>£274 Inc. £75 Cashback*</b>	
<b>New</b> EF 24-105mm f4L IS II USM .....	£1129
EF 28-300mm f3.5-5.6 L IS USM .....	£1879
EF-S 55-250mm f4.5-6.3 IS STM .....	£229
EF 70-200mm f2.8 L IS USM II .....	£1599
<b>£1449 Inc. £150 Cashback*</b>	
EF 70-200mm f4L IS USM .....	£899
EF 70-300mm f4.0-5.6 L IS USM .....	£1029
EF 100-400mm f4.5-5.6L IS USM II .....	£1799
<b>£1649 Inc. £150 Cashback*</b>	



**NIKON LENSES**

10.5mm f2.8 G IF-ED AF DX Fisheye .....	£549
14mm f2.8 D AF ED Lens .....	£1389
20mm f1.8 G AF-S ED .....	£649
24mm f1.4 G AF-S ED .....	£1789
24mm f1.8 G AF-S ED .....	£629
28mm f1.8 G AF-S .....	£495
35mm f1.8 G ED AF-S .....	£399
40mm f2.8 G AF-S DX Micro .....	£209
45mm f2.8 D PC-E Micro .....	£1393
58mm f1.4 G AF-S .....	£1349
60mm f2.8 D AF Micro .....	£409
60mm f2.8 G AF-S ED .....	£439
85mm f1.8 G AF-S .....	£399
105mm f2.8 G AF-S VR IF ED Micro .....	£749
135mm f2.0 D AF DC .....	£1029
180mm f2.8 D AF IF-ED .....	£739
300mm f4.0E AF-S PF ED VR .....	£1470
500mm f4.0E FL AF-S ED VR .....	£8449

600mm f4.0E FL AF-S ED VR .....	£9729
10-24mm f3.5-4.5 G AF-S DX .....	£729
16-80mm f2.8-4G ED AF-S DX VR .....	£860
16-85mm f3.5-5.6 G ED AF-S DX VR .....	£569
17-55mm f2.8 G ED DX AF-S IF .....	£1199
18-35mm f3.5-4.5G AF-S ED .....	£549
18-105mm AF-S DX f3.5-5.6 G ED VR .....	£195
18-140mm f3.5-5.6 G ED AF-S DX VR .....	£470
18-200mm f3.5-5.6 G ED AF-S DX VR II .....	£625
18-300mm f3.5-5.6 ED AF-S VR .....	£849
24-70mm f2.8 G ED AF-S .....	£1599
24-85mm f3.5-4.5 AF-S G ED VR .....	£429
24-70mm f2.8E AF-S ED VR .....	£1999
24-120mm f4 G AF-S ED VR .....	£849
28-300mm f3.5-5.6 G ED AF-S VR .....	£829
55-200mm f4.0-5.6 G AF-S ED DX VR II .....	£254
55-300mm f4.5-5.6 G AF-S DX VR .....	£269
70-200mm f2.8G ED AF-S VR II .....	£1799
70-300mm f4.5-5.6 G ED AF-S IF VR .....	£499
80-400mm f4.5-5.6 G ED AF-S VR .....	£2089
200-500mm f5.6E AF-S ED VR .....	£1179

18-300mm f3.6-6.3 C DC .....	
Macro OS HSM .....	£336
24-35mm f2 DG HSM A .....	£699
24-70mm f2.8 IF EX DG HSM .....	£526
70-200mm f2.8 EX DG OS HSM .....	£729
120-300mm f2.8 OS .....	£2499
150-600mm f5.0-6.3 S DG OS HSM .....	£1199
150-600mm f5-6.3 C DG OS HSM .....	£739

**TAMRON**

**TAMRON LENSES - with 5 Year Manufacturer Warranty**

90mm f2.8 SP Di USD VC Macro .....	£579
180mm f3.5 Di SP AF Macro .....	£729
10-24mm f3.5-4.5 Di II LD SP AF ASP IF .....	£409
15-30mm f2.8 SP Di VC USD .....	£929
16-300mm f3.5-6.3 Di II VC PZD Macro .....	£429
18-200mm f3.5-6.3 Di II VC .....	£169
18-270mm f3.5-6.3 Di II VC PZD .....	£299
24-70mm f2.8 Di VC USD SP .....	£799
28-300mm f3.5-6.3 Di VC PZD .....	£599
70-200mm f2.8 Di VC USD .....	£1099
150-600mm f5-6.3 SP Di VC USD .....	£829

**SIGMA**

**SIGMA LENSES - with 3 Year Manufacturer Warranty**

24mm f1.4 DG HSM A .....	£599
30mm f1.4 DC HSM .....	£299
35mm f1.4 DG HSM .....	£599
85mm f1.4 EX DG HSM .....	£619
105mm f2.8 APO EX DG OS HSM Macro .....	£319
150mm f2.8 EX DG OS HSM Macro .....	£649
8-16mm f4.5-5.6 DC HSM .....	£499
10-20mm f3.5 EX DC HSM .....	£329
12-24mm f4.5-5.6 EX DG HSM II .....	£529
17-70mm f2.8-4.0 DC OS HSM .....	£319
18-250mm f3.5-6.3 DC Macro OS HSM .....	£279

Canon Cashback\* offer ends 18.10.16

**For Canon-fit Tamron, Sigma or Samyang lenses, visit our website**

**Photo Bags & Rucksacks**



Purpose-built to organise and protect more gear, and provide more options for manoeuvring in busy airports

<b>Pro Runner:</b>	
BP 350 AW II .....	£179
BP 450 AW II .....	£159



Perfect for carrying a compact system camera with 12-40mm lens attached, 3-4 lenses/flashes, an 11" MacBook Air, plus small accessories.

<b>Photo Sport BP:</b>	
250 AW .....	£147
450 AW .....	£199



**Manfrotto Pro Light RedBee-210 Reverse Backpack**

Designed for security conscious and travel photographer, the Manfrotto Pro Light RedBee-210 Reverse Access Backpack is designed for photographers and videographers on the move.



	£89
--	-----



**Anvil Slim Professional Backpack**



<b>Anvil:</b>	
Anvil Slim .....	£139
Anvil Super .....	£139
Anvil Pro .....	£149

**Billingham**



<b>Hadley Pro Original Khaki</b>	
Canvas/Leather: Khaki, Black FibreNyte/Leather: Khaki, Sage, Black.	
Digital .....	£109
Small .....	£129
Large .....	£154
Pro Original .....	£169

**Computing**



<b>PIXMA Pro 100S .....</b>	<b>£375</b>
-----------------------------	-------------

<b>PIXMA Pro 10S .....</b>	<b>£529</b>
----------------------------	-------------

<b>PIXMA Pro 1 .....</b>	<b>£629</b>
--------------------------	-------------



<b>Datacolor Spyder 5 Pro .....</b>	<b>£139</b>
<b>i1 Display Pro .....</b>	<b>£170</b>
<b>ColorMunki Smile .....</b>	<b>£79</b>
<b>Intuos Pro Professional Pen and Touch Tablet Small .....</b>	<b>£165</b>
<b>Medium .....</b>	<b>£245</b>
<b>Large .....</b>	<b>£345</b>

**Digital Compact Cameras**

Digital compact camera accessories are available on our website



16.1 megapixels  
65x optical zoom  
1080p movie mode



**PowerShot G5 X**  
£579

20.1 megapixels  
4.2x optical zoom  
1080p movie mode



**PowerShot G7 X Mk II**  
£549

12.8 megapixels  
5.0x optical zoom  
1080p movie mode



**PowerShot G9 X**  
£369

<b>PowerShot IXUS 285 HS .....</b>	<b>£154</b>
<b>PowerShot SX60 HS .....</b>	<b>£349</b>
<b>PowerShot SX540 .....</b>	<b>£277</b>
<b>PowerShot SX720 .....</b>	<b>£279</b>
<b>PowerShot G1 X Mark II .....</b>	<b>£479</b>
<b>PowerShot G3 X .....</b>	<b>£649</b>

**RICOH**

**Theta S Digital Spherical Camera**

12 Megapixels with 1080p movie mode and 360° stills .....

£299



**Panasonic Black or Silver**

24x optical zoom



**Lumix LX100**  
£499

20.1 megapixels



**Lumix TZ100**  
£549



**Lumix DMC-FZ1000**  
£599

<b>Lumix TZ60 .....</b>	<b>£249</b>
<b>Lumix FZ72 .....</b>	<b>£229</b>
<b>Lumix TZ70 .....</b>	<b>£259</b>
<b>Lumix FZ200 .....</b>	<b>£279</b>
<b>Lumix TZ80 .....</b>	<b>£329</b>

**OLYMPUS**

**Stylus TG-4**

£264



**Stylus Tough TG-870**

£249

Black



**FUJIFILM**

**Black or Silver**

16.3 megapixels

APS-C size sensor



**X100T** £776

16.3 megapixels



**Fuji X70** £499

16.4 megapixels



**Fuji X90** £149

**SONY Black**

18.2 megapixels  
30.0x optical zoom  
1080p movie mode



**Cyber-Shot HX90V**  
£299

<b>Cyber-shot WX500 .....</b>	<b>£269</b>
<b>Cyber-shot HX400 .....</b>	<b>£299</b>
<b>Cyber-Shot RX100 II .....</b>	<b>£439</b>
<b>Cyber-Shot RX100 III .....</b>	<b>£599</b>
<b>Cyber-Shot RX10 .....</b>	<b>£719</b>
<b>Cyber-Shot RX100 IV .....</b>	<b>£829</b>
<b>Cyber-Shot RX10 II .....</b>	<b>£1199</b>

**For Sony batteries and cases visit our website**



16 megapixels  
83x optical zoom  
1080p movie mode



**P900** £499



**DJI Quadcopter Drones** £449



# RICHARD CAPLAN

Leica Specialist

HASSELBLAD

Get your hands on the new Hasselblad X1D and H6D at Richard Caplan Photographic

September 28th 10.00am to 4.00pm



## Hasselblad X1D-50c

Medium format mirrorless camera  
50 megapixels CMOS sensor  
Smaller than most 35mm cameras  
High resolution touch screen  
High resolution electronic viewfinder



## Hasselblad H6D-100c

Medium format digital SLR  
100 megapixels CMOS sensor  
Unmatchable image quality  
15 stops dynamic range  
UHD & HD video

HASSELBLAD  
CREATE TO INSPIRE

# RICHARD CAPLAN

60 Pall Mall, London SW1Y 5HZ  
Tel. 0207 807 9990



Leica Specialist

HASSELBLAD

[www.richardcaplan.co.uk](http://www.richardcaplan.co.uk)



We Sell, Buy and Part-Exchange Premium Photo Equipment

**WE WANT YOUR  
USED EQUIPMENT**

COMMISSION SALES  
PART EXCHANGE  
CASH PURCHASE



**CONTACT US FOR PRICES**

### LEICA M BODIES - DIGITAL

Leica M (TYP 240) black, finder, grip £3,250  
Leica M9 from £2,199  
Leica M-E body, boxed, near mint £2,399  
Leica M Monochrom mk1 from £2,750  
Leica M8.2 black, just serviced by Leica £1,195

### LEICA M BODIES - FILM

Leica M7 black, US flag £1,399  
Leica M7 black body, 0.58 £1,299  
Leica M6 TTL silver, boxed, 0.72 £1,299  
Leica M6 TTL black, boxed, 0.72 £1,199  
Leica M2 body from £599

### LEICA M LENSES

Leica 18mm/3.8 SUPER-ELMAR-M, boxed £1,699  
Leica 21mm/1.4 SUMMILUX-M ASPH, boxed £3,995  
Leica 21mm/2.8 ELMARIT-M ASPH from £1,299  
Leica 21mm/2.8 ELMARIT-M + finder £1,299  
Zeiss 21mm/2.8 BIOGON ZM + hood £599  
Leica 24mm/2.8 ELMARIT-M ASPH from £999  
Leica 28mm/2 SUMMICRON-M ASPH from £1,899  
Leica 35mm/1.4 SUMMILUX-M + hood £1,399  
Leica 35mm/1.4 SUMMILUX-M ASPH +hood £2,499  
Leica 50mm/0.95 NOCTILUX-M ASPH, boxed £5,250  
Leica 50mm/1 NOCTILUX-M, boxed £4,250  
Leica 50mm/1.4 ASPH, 6-bit, black, boxed £1,995  
Leica 50mm/1.4 SUMMILUX-M, + hood £1,299  
Zeiss 50mm/1.5 C SONNAR ZM silver £599  
Leica 50mm/2.8 ELMAR-M collapsible+hood £549  
Leica 50mm/2 version 4 (late) from £999

Leica 50mm/2.5 SUMMARIT-M

Leica 5cm/2 SUMMICRON 'RIGID' £749  
Leica 75mm/2.5 SUMMARIT-M boxed 6bit £499  
Voigtlander 75mm/1.5 heliar classic £799  
Leica 90mm/2 SUMMICRON-M £375  
Leica 90mm/2.8 ELMARIT-M from £899  
Leica 90mm/2.5 SUMMARIT-M from £899  
Leica 135mm/4 ELMAR SILVER £799

### LEICA SCREW MOUNT

Reid III + 50mm/2 Taylor-Hobson, case, cap £1,750  
Leica IIIc inc 5cm/2 collapsible £599  
Leica II inc 5cm/3.5 ELMAR (1937) £499  
Leica Standard inc 5cm/3.5 elmar (1939) £599

Leica IIIa inc 5cm/3.5 £349  
Leica IIIf red dial inc 5cm/3.5 collapsible £399  
Leica Ic body, silver £399  
Leitz 2.8cm/6.3 HEKTOR chrome £549  
Leitz 9cm/4 'FAT' ELMAR black/nickel £449

### LEICA R

Leica R9 black, near mint £599  
Leica R9 black, inc motor-winder £599  
Leica R7 black body £349  
Leica 35mm/1.4 SUMMILUX-R, ROM, mint £2,699  
Leica 50mm/2 SUMMICRON-R £299  
Leica 180mm/3.4 APO-TELYT-R £599  
Leica 280mm/2.8 APO-TELYT-R + case, filter £2,249  
Leica 350mm/4.8 TELYT-R + CASE £799  
Leica 105-280mm/4.2 VARIO-ELMAR-R £2,395  
Nikkor 16mm/2.8 fisheye AI-S, boxed £499

### NIKON

Nikon S3 2000 w/50mmf1.4 mint, inc ERC £1,649  
Nikon FM2 black body £149  
Nikkor Micro 105mm/2.8 AIS £249  
Nikkor 14-24mm/2.8 AF-S G £899  
Nikon SB-900 flash, with case, colour filters £185  
Nikkor 12-24mm/4 AF-S G ED DX £249  
Nikon 28-300mm AF-S G VR £499

### MISCELLANEOUS

Sinar P kit, 150mm/5.6 APO, accessories, case £999  
Sinar F kit, 240mm/5.6 APO, accessories, case £699  
Hasselblad 500ELM 'moon' special edition £1,250  
Hasselblad 202FA, 150mm/2.8, prism, E12 £1,999  
Hasselblad 500C/M kit, 80mm/2.8, exc++ £999  
Hasselblad 150mm/4 Cfi + filter+hood £799  
Canon 7D with 17-55mm/2.8 EF-S IS £799  
Canon 50mm/1.2 EF L £799  
Canon 50mm/1.4 EF £225  
Sigma 180mm/3.5 MACRO for Canon EOS £299  
Zeiss/Sony 16-35mm/4 FE ZA OSS, boxed £749  
FUJIFILM 14mm/2.8 boxed £399  
Fujifilm XT-1 with 35mm/1.4 XF lens £799  
Fuji X100 silver from £299  
Leica X-VARIO black + half case £999  
Leica T kit, 23mm, 18-56mm, Visoflex £1,795  
Leica 8-12x42 DUOVID + case £999  
Leica 8x32 TINOVID BA + case £499  
Leica 10x25 TRINOVID BCA + case £199  
E&OE, P&P £10 - next day delivery.





# PARKCameras



Visit our state of the art  
stores in Burgess Hill (West Sussex)  
and Central London

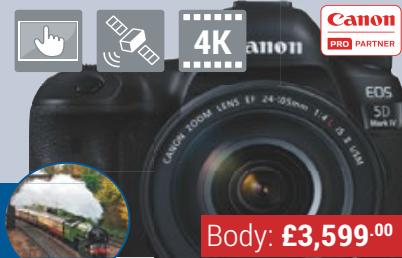
Visit our website for directions &  
opening times for both stores

📷 Experts in photography 📷 Unbeatable stock availability 📷 Competitive low pricing 📷 UK stock

## EOS 5D Mark IV

No matter who you are, or what you're shooting, the EOS 5D Mark IV delivers uncompromising image quality and a professional performance.

Purchase from Park Cameras and you'll go into a draw to **WIN ONE OF FOUR** prizes!



## D3400

The D3400 makes it spectacularly easy to shoot and share DSLR-quality images. Nikon's SnapBridge keeps the camera connected to your smart device via Bluetooth® so you can actually sync photos as you shoot. Pick up your phone and the photos are there, ready to share: no fuss, no waiting.

**NEW & NOW IN STOCK!** See website for details



### Canon EOS 750D

24.2 MEGA PIXELS 5 FPS

Body only + 18-55 IS STM  
**£529.00 £579.00**

Add a Canon LP-E17 spare battery for only **£44.00!**

### Canon EOS 70D

20.2 MEGA PIXELS 7 FPS

Body only + 18-55 IS STM  
**£699.00 £849.00**

Add a Canon BG-E14 battery grip for only **£149.00!**

### Canon EOS 80D

24.2 MEGA PIXELS 7 FPS

Body only + 18-135 IS USM  
**£999.00 £1,299.00**

Add a Canon BG-E14 battery grip for only **£149.00!**

### Nikon D5500

24.2 MEGA PIXELS

Body only + AF-P 18-55 VR  
**£549.00 £588.00**

Add a Nikon EN-EL14a spare battery for only **£40.00!**

### Nikon D7200

24.2 MEGA PIXELS 6 FPS

Body only + 18-105 VR  
**£849.00 £1,079.00**

Add a Nikon MB-D15 battery grip for only **£229.00!**

### Nikon D610

24.3 MEGA PIXELS 6 FPS

Body only + 24-85 VR  
**£1,299.00 £1,699.00**

Visit [www.parkcameras.com/used](http://www.parkcameras.com/used) for pre-loved D610 bodies

### Canon EOS 7D Mark II

20.2 MEGA PIXELS 10 FPS

Body only + 100-400 L IS II  
**£1,179.00 £2,899.00**

Visit us in store or online to see how you can claim **Canon lens rewards!**

### Canon EOS 6D

20.2 MEGA PIXELS FULL FRAME

Body only + 24-105 IS STM  
**See web See web**

Add a Canon BG-E13 battery grip for only **£174.00!**

### Canon EOS 5D Mark III

22.3 MEGA PIXELS FULL FRAME

Body only + BG-E11 grip  
**See web See web**

Visit us in store or online to see how you can claim **Canon lens rewards!**

### Nikon D750

24.3 MEGA PIXELS FULL FRAME

Body only + 24-120mm VR  
**£1,699.00 £2,299.00**

Add a Nikon MB-D16 battery grip for only **£244.00!**

### Nikon D500

20.9 MEGA PIXELS 10 FPS

Body SRP £1,729.00

**NOW IN STOCK!!**

Save up to **5%** on selected accessories! See website for details.

### Nikon D5

20.8 MEGA PIXELS 153 AF POINTS

Body SRP £5,199.00

**NEW!**

See website for latest information on availability!

Save up to **5%** on selected accessories! See website for details.

### Canon EOS 5Ds

50.6 MEGA PIXELS FULL FRAME

Body only **See web**

See website for low prices on lenses

Add a Canon BG-E11 battery grip for only **£225.00!**

### Canon EOS 5Ds R

50.6 MEGA PIXELS FULL FRAME

Body only **See web**

See website for low prices on lenses

Add a Canon WFT-E7 wireless file transmitter for only **£599.00!**

### Canon EOS-1D X Mark II

20.2 MEGA PIXELS 14 FPS

Body SRP £5,199.00

**NOW IN STOCK!!**

Claim a **FREE SanDisk 64GB Extreme PRO CFast 2.0 Card and Reader!**

Give your camera an individual look by creating your own personalised strap - available when purchasing selected cameras

• EOS 80D • EOS 760D • EOS 750D • EOS 700D  
• EOS 100D • EOS 1300D • EOS M3 • EOS M10

Claim your strap at [www.canon.co.uk/camerastrap](http://www.canon.co.uk/camerastrap). Available 01.09.16 - 18.10.16

## CANON LENSES

Prices updated DAILY! Visit us in store, online at [parkcameras.com](http://parkcameras.com) or call our expert team on 01444 23 70 60

14mm f/2.8L II USM	<b>See website</b>	180mm f/3.5L USM	<b>See website</b>	17-40mm f/4.0L USM	<b>See website</b>
20mm f/2.8 USM	<b>£385.00</b>	200mm f/2.0L IS USM	<b>See website</b>	EF-S 17-55mm f/2.8 IS USM	<b>See website</b>
24mm f/1.4L Mk II USM	<b>See website</b>	200mm f/2.0L USM/2	<b>See website</b>	EF-S 18-135mm IS STM	<b>£329.00</b>
24mm f/2.8 IS USM	<b>£455.00</b>	300mm f/2.8L USM IS II	<b>£4,799.00</b>	EF-S 18-200mm f/3.5-5.6	<b>£385.00</b>
EF-S 24mm f/2.8 STM	<b>£127.00</b>	300mm f/4.0L USM IS	<b>See website</b>	24-70mm f/2.8L II USM	<b>See website</b>
28mm f/1.8 USM	<b>£379.00</b>	400mm f/2.8L USM IS II	<b>See website</b>	24-70mm f/4.0L IS USM	<b>£675.00</b>
28mm f/2.8 IS USM	<b>£379.97</b>	400mm f/4.0 DO IS II	<b>See website</b>	24-105mm f/4.0L IS USM	<b>£735.00</b>
35mm f/1.4L USM	<b>£959.00</b>	400mm f/5.6L USM	<b>See website</b>	24-105mm f/3.5-5.6 IS STM	<b>£375.00</b>
35mm f/1.4L II USM	<b>£1,799.00</b>	500mm f/4.0L IS MK II	<b>See website</b>	28-300mm f/3.5-5.6L IS	<b>See website</b>
35mm f/2.0 IS USM	<b>£379.00</b>	600mm f/4.0L IS MK II	<b>See website</b>	EF-S 55-250mm f/4-5.6 IS STM	<b>£229.00</b>
40mm f/2.8 STM	<b>£149.00</b>	800mm f/5.6L IS USM	<b>See website</b>	70-200mm f/2.8L IS II USM	<b>See website</b>
50mm f/1.2 L USM	<b>See website</b>	TSE 17mm f/4.0L	<b>See website</b>	70-200mm f/2.8L USM	<b>See website</b>
50mm f/1.4 USM	<b>See website</b>	TSE 24mm f/3.5L II	<b>See website</b>	70-200mm f/4.0L IS USM	<b>See website</b>
50mm f/1.8 STM	<b>£97.00</b>	TSE 45mm f/2.8	<b>See website</b>	70-200mm f/4.0L USM	<b>See website</b>
EF-S 60mm f/2.8 Macro	<b>£349.00</b>	TSE 90mm f/2.8	<b>See website</b>	70-300mm f/4.0-5.6 IS	<b>£356.00</b>
MP-E 65mm f/2.8	<b>£779.00</b>	8-15mm f/4L Fisheye USM	<b>See website</b>	70-300mm f/4.0-5.6L IS USM	<b>See website</b>
85mm f/1.2L II USM	<b>See website</b>	EF-S 10-18mm IS STM	<b>£185.00</b>	70-300mm DO IS USM	<b>See website</b>
85mm f/1.8 USM	<b>See website</b>	EF-S 10-22mm f/3.5-4.5	<b>See website</b>	75-300mm f/4.0-5.6 III	<b>£188.00</b>
100mm f/2 USM	<b>£349.00</b>	EF 11-24mm f/4L USM	<b>£2,799.00</b>	75-300mm f/4.0-5.6 III	<b>£219.00</b>
100mm f/2.8 USM Macro	<b>£373.00</b>	EF-S 15-85mm f/3.5-5.6 IS	<b>£539.00</b>	100-400mm L IS USM II	<b>£1,799.00</b>
100mm f/2.8L Macro IS	<b>See website</b>	16-35mm f/2.8L II USM	<b>See website</b>	200-400mm f/4.0L USM	<b>See website</b>
135mm f/2.0L USM	<b>See website</b>	16-35mm f/4.0L IS USM	<b>See website</b>	1.4x III Extender	<b>See website</b>

Create your ultimate kit bag with up to  
**£150 cashback** on selected Canon lenses!

See web for details. Available 01.09.16 - 18.10.16

## CANON ACCESSORIES

Prices updated DAILY!  
See [www.parkcameras.com/ap](http://www.parkcameras.com/ap) for details.

Flashguns	Printers	Battery Grips
Speedlite 90EX	PIXMA TS8050 <b>NEW</b>	BG-E11 (5D III, 5Ds/r)
Speedlite 270EX II	PIXMA iP8750	BG-E13 (6D)
Speedlite 320EX	PIXMA PRO-100s	BG-E14 (70D)
Speedlite 430EX III-RT	PIXMA PRO-10s	BG-E16 (7D Mark II)
Speedlite 600EX-RT	PIXMA PRO-1	BG-E18 (7D Mark II)

### E-Series

16mm f/2.8 Pancake	<b>£199.00</b>
24mm f/1.8 ZA Carl Zeiss	<b>£889.00</b>
24mm f/2.0 Carl Zeiss T*	<b>£999.00</b>
50mm f/1.8 OSS	<b>£259.00</b>
55mm f/1.8 FE Sonnar T* ZA	<b>£799.00</b>
90mm f/2.8 Macro G FE OSS	<b>£949.00</b>
10-18mm f/4 OSS	<b>£699.00</b>
16-50mm f/3.5-5.6 OSS	<b>£279.00</b>

### Alpha-Series

16-70mm f/4G ZA OSS	<b>£799.00</b>
18-200mm f/3.5-6.3 P. Zoom	<b>£949.00</b>
24-70mm f/4 FE Vario-Tessar T*	<b>£899.00</b>
24-240mm f/3.5-6.3 FE OSS	<b>£849.00</b>
28-70mm f/3.5-5.6 FE OSS	<b>£449.00</b>
28-135mm f/4 G FE PZ OSS	<b>£2,099.00</b>
55-210mm f/4.5-6.3 OSS	<b>£229.00</b>
70-200mm f/4 G FE OSS	<b>£1,249.00</b>

### Alpha-Series

30mm f/2.8 SAM 1:1 Macro DT	<b>£118.97*</b>
35mm f/1.8 DT	<b>£149.00</b>
50mm f/1.4 Carl Zeiss	<b>£699.97*</b>
11-18mm f4.5-5.6 DT	<b>£599.00</b>
16-35mm f/2.8 Carl Zeiss T*	<b>£2,200.00</b>
24-70mm f/2.8 II Carl Zeiss T*	<b>£2,000.00</b>
55-200mm f4.0-5.6 SAM DT	<b>£246.00</b>
70-200mm f/2.8 G SSM II	<b>£2,799.00</b>

### E-Series

16mm f/2.8 Pancake	<b>£199.00</b>
24mm f/1.8 ZA Carl Zeiss	<b>£889.00</b>
24mm f/2.0 Carl Zeiss T*	<b>£999.00</b>
50mm f/1.8 OSS	<b>£259.00</b>
55mm f/1.8 FE Sonnar T* ZA	<b>£799.00</b>
90mm f/2.8 Macro G FE OSS	<b>£949.00</b>
10-18mm f/4 OSS	<b>£699.00</b>
16-50mm f/3.5-5.6 OSS	<b>£279.00</b>

### Alpha-Series

16-70mm f/4G ZA OSS	<b>£799.00</b>
18-200mm f/3.5-6.3 P. Zoom	<b>£949.00</b>
24-70mm f/4 FE Vario-Tessar T*	<b>£899.00</b>
24-240mm f/3.5-6.3 FE OSS	<b>£849.00</b>
28-70mm f/3.5-5.6 FE OSS	<b>£449.00</b>
28-135mm f/4 G FE PZ OSS	<b>£2,099.00</b>
55-210mm f/4.5-6.3 OSS	<b>£229.00</b>
70-200mm f/4 G FE OSS	<b>£1,249.00</b>

### Alpha-Series

30mm f/2.8 SAM 1:1 Macro DT	<b>£118.97*</b>
35mm f/1.8 DT	<b>£149.00</b>
50mm f/1.4 Carl Zeiss	<b>£699.97*</b>
11-18mm f4.5-5.6 DT	<b>£599.00</b>
16-35mm f/2.8 Carl Zeiss T*	<b>£2,200.00</b>
24-70mm f/2.8 II Carl Zeiss T*	<b>£2,000.00</b>
55-200mm f4.0-5.6 SAM DT	<b>£246.00</b>
70-200mm f/2.8 G SSM II	<b>£2,799.00</b>

All prices include VAT @ 20%. For opening times and store addresses, visit [www.parkcameras.com/AP](http://www.parkcameras.com/AP).  
All products are UK stock. E&OE. \* = Please mention "Amateur Photographer" for this special price  
Prices correct at time of going to press; Prices subject to change; check website for latest prices.





Visit our website - updated daily  
**www.parkcameras.com/ap**  
or e-mail us for sales advice using  
sales@parkcameras.com

Call one of our knowledgeable sales advisors  
Monday - Saturday (9:00am - 5:30pm) or Sunday (9:30am - 4:00pm)

**01444 23 70 60**

**WIN!!**

Sign up to our free newsletter for the chance to win a Canon EOS 1300D kit!  
Visit [www.parkcameras.com](http://www.parkcameras.com) to sign up.

UK's largest independent photo store • Award winning customer service • Family owned & Run

## Panasonic LUMIX GX80

16.0  
MEGA  
PIXELS

Wi-Fi / NFC

3.0"

PHOTO

IS

4K

£50  
cashback

Capture those unmissable moments and preserve life memories and experiences that happen in fleeting moments. The LUMIX GX80 reacts as quickly as you do – Shoot, select & save with 4K Photo.

Body only **£459.00\*** +12-32mm **£499.00\*** Twin lens kit **£679.00\***

\*Prices include £50 cashback Panasonic. Ends 10.10.16



## Panasonic GX8

20.3  
MEGA  
PIXELS

Wi-Fi / NFC

£50  
cashback

Body only **£769.00** + 12-60mm **£819.00\***

\*Price includes £50 cashback from Panasonic UK. Ends 10.10.16

## Panasonic GH4R

16.0  
MEGA  
PIXELS

PHOTO

£50  
cashback

Body only **£949.00\*** + 14-140mm **£1,299.00\***

\*Prices include £50 cashback from Panasonic UK. Ends 10.10.16

## PANASONIC LENSES

14mm f/2.5 II Pancake **£299.00**  
20mm f/1.7 II ASPH **£269.00**  
45mm f/2.8 Macro **£498.00**  
42.5mm f/1.2 O.I.S **£1,099.00**  
7-14mm f/4.0 ASPH **£739.00**  
12-60mm f/3.5-5.6 ASPH **£359.00**  
14-140mm f/3.5-5.6 **£405.00**  
35-100mm f/2.8 O.I.S **£799.00**  
45-175mm f/4.0-5.6 O.I.S **£279.00**  
100-300mm f/4-5.6 O.I.S **£378.00**  
100-400mm f/4.0-6.3 **£1,349.00**  
See website for even more lenses!

## PENTAX K-1

36.4  
MEGA  
PIXELS

5 FPS

3.2"

PHOTO

IS

1080p

Pro Centre  
PENTAX

The K-1 features a 36.4 megapixel full-frame sensor with an AA filter simulator, Full HD video, a new SR II 5-axis shake reduction mechanism, and is compatible with numerous lenses.

In stock at only **£1,599.00**



## Pentax K-S2

16.1  
MEGA  
PIXELS

8 FPS

Body only **£469.00** + 18-50mm WR **£529.00**

Add a Pentax remote control F for only £21.90.

## Pentax K-3 II

24.3  
MEGA  
PIXELS

PHOTO

FREE LENS!

Body only **See web** + 18-55mm WR **£699.00**

Receive a FREE Pentax 50mm f/1.8 if bought before 11.09.2016. See web

## Pentax K-70

24.2  
MEGA  
PIXELS

PHOTO

Body only **£559.00** + 18-135mm WR **£799.00**

Add a Pentax D-Li109 spare battery for only £64.00.

## Panasonic TZ100

20.1  
MEGA  
PIXELS

PHOTO

In stock at **£549.00** Available in Black or Silver

Add a Panasonic DMW-BLG10 spare battery for **£59.99**

## Panasonic LX100

12.8  
MEGA  
PIXELS

PHOTO

In stock at only **£499.00** Add the MS2E mic for **£279**

Add a Panasonic DMW-BLG10 spare battery for **£59.99**

## Panasonic FZ330

24x

PHOTO

In stock at only **£449.00** Add the BLC12 batt for **£49**

Add a Lexar 32GB 1000x UHS-II Pro SD card for only **£25**

## FUJIFILM X-T2

24.3  
MEGA  
PIXELS

14 FPS

3.0"

PHOTO

SD card

4K

Body SRP  
£1,399.00

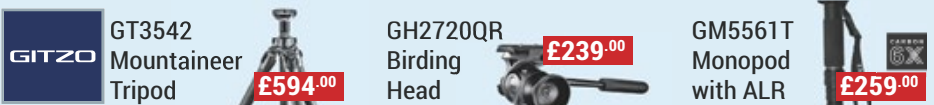
The outstanding X-T2 is the flagship model of the X-Series and boasts a 24.3MP sensor without a low-pass filter, 4K video recording, & offers numerous technical improvements over its predecessor, the X-T1.

**STOCK NOW ARRIVING!**  
See website for the latest information on availability



## Manfrotto Imagine More

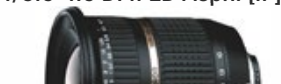
See the range of Manfrotto Tripods, Monopods, backpacks, shoulder bags, sling bags, compact cases, lights and more at [www.parkcameras.com/ap](http://www.parkcameras.com/ap), or by visiting our Burgess Hill or Central London stores.



## TAMRON LENSES

Prices updated DAILY! Visit us in store, online at [parkcameras.com](http://parkcameras.com) or call our expert team on 01444 23 70 60

### Tamron SP 10-24mm f/3.5-4.5 Di II LD Asph. [IF]



In stock at only **£419.00**

Add a Hoya Hoya 77mm REVO UV filter for £50 on mention of this advert

### Tamron SP 24-70mm f/2.8 Di VC USD



In stock at only **£799.00**

Add a Hoya Hoya 82mm UV (C) filter for £29 on mention of this advert

### Tamron 150-600mm f/5-6.3 Di VC USD G2



Price and availability TBC. See website for updates.

Register your interest to receive one of the first lenses available!

Visit our website for full details on all the Tamron lenses, as well as our latest **LOW PRICES!**

### Tamrac Stratus 8 Shoulder bag



In stock at only **£79.00**

### Beastgrip Pro Rig + Wide Angle lens



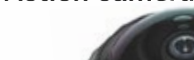
In stock at only **£169.00**

### CamRanger Wireless Camera Control



In stock at only **£269.00**

### 360FLY Action camera



In stock at only **£349.00**

### Metz 52 AF-1 Flash



In stock at only **£209.00**

### Steiner Observer Binoculars 8x42



In stock at only **£299.00**

## SIGMA LENSES

Prices updated DAILY! Visit us in store, online at [parkcameras.com](http://parkcameras.com) or call our expert team on 01444 23 70 60

### Sigma MC-11 Mount Converter



In stock at only **£199.00**

Purchase unboxed for only £179.00! Call us on 01444 23 70 60.

### Sigma 35mm f/1.4 DG HSM - Canon fit



In stock at only **£699.00**

Lens supplied with MC-11 FE mount adapter to fit it to your Sony body

### Sigma 150-600mm f/5-6.3 DG OS HSM | C



In stock at only **£739.00**

Available in Canon, Nikon or Sigma fits. See website for details.

4.5mm f/2.8 Fisheye EX DC <b>£599.00</b>	300mm f/2.8 APO EX DG <b>£2,199.00</b>	50-100mm f/1.8 DC HSM   Art <b>£829.00</b>
8mm f/3.5 Circ. Fish EX DG <b>£599.00</b>	500mm f/4.5 APO EX DG <b>£3,599.00</b>	50-500mm f/4.5-6.3 OS HSM <b>£849.00</b>
15mm f/2.8 Diag F/eye EX DG <b>£499.00</b>	8-16mm f/4.5-5.6 DC HSM <b>£499.00</b>	70-200mm f/2.8 APO EX DG OS <b>£729.00</b>
19mm f/2.8 DN <b>£119.00</b>	10-20mm f/3.5 EX DC HSM <b>£329.00</b>	70-300mm f/4.0-5.6 DG Macro <b>£99.00</b>
20mm f/1.4 DG HSM <b>£629.00</b>	12-24mm f/4.5-5.6 II DG HSM <b>£529.00</b>	70-300mm f/4.0-5.6 APO Macro <b>£149.00</b>
24mm f/1.4 DG HSM <b>£599.00</b>	17-50mm f/2.8 DC OS HSM <b>£279.00</b>	120-300mm f/2.8 DG OS HSM <b>£2,499.00</b>
30mm f/1.4 DC HSM <b>£299.00</b>	17-70mm f/2.8-4 DC OS <b>£319.00</b>	150-600mm Cont. + 1.4x <b>£849.00</b>
30mm f/2.8 DN <b>£119.00</b>	18-35mm f/1.8 DC HSM <b>£549.00</b>	150-600mm f/5-6.3 DG   S <b>£1,199.00</b>
35mm f/1.4 DG HSM <b>£599.00</b>	18-200mm f/3.5-6.3 DC OS HSM <b>£249.00</b>	150-600mm Sport + 1.4x <b>£1,299.00</b>
60mm f/2.8 DN <b>£119.00</b>	18-250mm DC Macro OS HSM <b>£279.00</b>	300-800mm f/5.6 EX DG HSM <b>£5,499.00</b>
85mm f/1.4 EX DG HSM <b>£619.00</b>	18-300mm f/3.5-6.3 DC Macro <b>£336.00</b>	1.4x Teleconverter APO EX DG <b>£179.00</b>
105mm f/2.8 EX DG OS HSM <b>£319.00</b>	24-35mm f/2 DG HSM Art <b>£699.00</b>	1.4x Teleconverter TC1401 <b>£229.00</b>
150mm f/2.8 OS Macro <b>£649.00</b>	24-70mm f/2.8 IF EX DG <b>£549.00</b>	2.0x Teleconverter APO EX DG <b>£199.00</b>
180mm f/2.8 EX DG OS HSM <b>£1,099.00</b>	24-105mm f/4 DG OS HSM <b>£599.00</b>	2.0x Teleconverter TC2001 <b>£269.00</b>

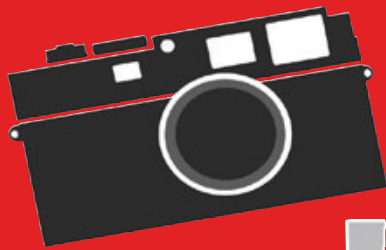
Visit our website for full details on all the Sigma lenses, as well as special deals on filters!

Can't see what you're after? See our website for thousands more products!

For a whole range of tips and tricks and news all the latest new products, visit [blog.parkcameras.com](http://blog.parkcameras.com)



■ *Real Shop*  
■ *Real People*



■ *Real Knowledge*  
■ *Real Cameras*

# www.ffordes.com

SITE UPDATED EVERY HOUR - 24 HOURS PER DAY

## Largest Used Equipment *Specialists* Since 1960

### Fuji X Series Lenses

12mm F2.8 Touit X Zeiss.....	Mint- £549
14mm F2.8 XF.....	E+ £439
18-55mm F2.8-4 XF.....	E++ £299
18mm F2 XF R.....	E++ £179
23mm F1.4 XF R.....	Mint- £549
50-230mm F4.5-6.7 OIS XC.....	E++ £239
55-200mm F3.5-4.8 OIS XF.....	E++ / Mint- £379 - £389
60mm F2.4 XF R Macro.....	E++ £299
300mm F6.3 Reflex ED UMC CS Samyang.....	E++ / Mint- £179 - £189

### Lenses - Micro 4/3rds

Panasonic 7-14mm F4 G Vario.....	E++ £549
12-32mm F3.5-5.6 OIS G.....	E++ £159
14-140mm F4-5.8 OIS HD.....	E+ £149
14-42mm F3.5-5.6 Asph OIS.....	E++ / Mint- £69 - £79
14-45mm F3.5-5.6 ASPH G Vario.....	E++ £129 - £149
35-100mm F2.8 GX OIS Vario.....	E++ £599
45-150mm F4-5.6 Asph OIS.....	E++ / Mint- £129
45-175mm F4-5.6 Asph Vario PZ.....	E++ £179
Olympus 9-18mm F4-5.6 M.Zuiko ED.....	Mint- £259
12-40mm F2.8 M.Zuiko.....	E++ / Mint- £489 - £499
14-42mm F3.5-5.6 EZ M.Zuiko.....	Mint- £129
14-42mm F3.5-5.6 M.Zuiko ED.....	E++ / Mint- £79
14-42mm F3.5-5.6 M.Zuiko II R -Black.....	E++ £79
17mm F1.8 M.Zuiko Black.....	Mint- £299
17mm F2.8 M.Zuiko.....	Mint- £129
40-150mm F4-5.6 ED M.Zuiko.....	Exc £49
45mm F1.8 M.Zuiko.....	Mint- £139
75mm F1.8 ED Black M.Zuiko.....	E++ £519
MC-14 1.4x Teleconverter.....	Mint- £199
7.5mm F3.5 Fisheye Samyang.....	Mint- £179
19mm F2.8 DN - A Sigma.....	Mint- £89
25mm F0.95 Nokton Voigtlander.....	E+ £439
26mm F1.4 - Micro 4/3rds SIR Magic.....	E++ £59

### Sony NEX Lenses

18-55mm F3.5-5.6 OSS.....	Mint- £89
19mm F2.8 DN - Black A Sony Nex.....	Mint- £89
24-70mm F4 FE ZA OSS.....	Mint- £589 - £629
32mm F1.8 Touit E Zeiss.....	Mint £269
55-210mm F4.5-6.3 OSS.....	Mint- £119
Composer Pro + Sweet 50 Lens Baby.....	Mint- £99

### Bronica ETRS/Si Lenses

40mm F4 PE.....	As Seen £79
45-90mm F4.5-5.6 PE.....	E++ £399
50mm F2.8 PE.....	E++ £149
70-140mm F4.5 PE.....	E++ £599
100mm F4 E Macro.....	E+ £149
150mm F3.5 E.....	As Seen / E++ £29 - £109
150mm F3.5 PE.....	E++ £119
180mm F4.5 PE.....	E+ £159
200mm F4.5 E.....	E+ / E++ £69 - £129
200mm F5.6 E.....	E++ £79
250mm F5.6 E.....	E+ / E++ £79 - £99

### Bronica SQ Lenses

40mm F4 PS.....	E++ £229
50mm F3.5 PS.....	E+ / E++ £149 - £179
135mm F4 PS.....	E++ £229
200mm F4.5 S.....	E++ £129
250mm F5.6 PS.....	E+ £129
500mm F8 S.....	E+ £249

### Canon EOS Fit Lenses

8-15mm F4 L Fisheye USM.....	E++ £749
10-17mm F3.5-4.5 DX Fish Eye Tokina.....	Ex Demo £469
10-22mm F3.5-4.5 EFS.....	E++ / Mint- £249 - £279
10-24mm F3.5-4.5 Di II LD Asph Tamron.....	Mint- £249
12-24mm F4 ATX PRO SD Tokina.....	E++ £199
14mm F2.8 L USM.....	Exc £499
14mm F2.8 L USM II.....	E+ / E++ £999 - £1,049
14mm F2.8 Pro Walimex.....	Mint- £199
15mm F2.8 EF Fisheye.....	E++ £379 - £449
17-40mm F4 L USM.....	E++ £339
17-55mm F2.8 EFS IS USM.....	E++ £349
17-85mm F4-5.6 IS USM.....	E++ £129
17mm F3.5 ATX Pro Tokina.....	E++ £189
18-200mm F3.5-6.3 XR Di II Tamron.....	E++ £99
18-55mm F3.5-5.6 EFS IS.....	E++ £79
18-55mm F3.5-5.6 IS EFS II.....	E++ £79
18-55mm F3.5-5.6 IS STM.....	Mint- £89
20-35mm F3.5-4.5 USM.....	E+ / E++ £129 - £159
20mm F2.8 USM.....	E+ £199
22mm F2 STM.....	Mint- £89
24-105mm F4 L IS USM.....	Exc / E++ £329 - £429
24-70mm F2.8 L USM.....	E++ £689
24-70mm F4 L IS USM.....	Mint- £489 - £579
24mm F2.8 Super Wide II Sigma.....	E+ £59

24mm F3.5 L TSE.....	E+ / Mint £699 - £749
24mm F3.5 L TSE MkII.....	Mint- £1,149
28-105mm F3.5-4.5 USM.....	E++ £119
28-135mm F3.5-5.6 IS USM.....	As Seen £89
28-75mm F2.8 XR Di Tamron.....	E++ £189
28-80mm F2.8 ATX Pro Tokina.....	E++ £179
28-80mm F3.5-5.6 USM V.....	E++ £39
28-90mm F4-5.6 USM.....	E++ £45
28mm F1.8 USM.....	E++ £279
28mm F2 ZE Zeiss.....	E+ £465
35-135mm F3.3-4.5 MM Contax.....	E++ £429
35-350mm F3.5-5.6 L USM.....	Exc £499
35-70mm F3.4 MM Contax.....	E++ £279
35mm F1.8 Di VC USD Tamron.....	E++ £379
35mm F2.8 Macro DX ATX Tokina.....	E++ £199
40mm F2.8 STM.....	E++ / Mint- £99
50-135mm F2.8 DX ATX Tokina.....	E++ £299
500mm F4.5 L USM.....	E+ £2,189
50mm F1.0 L USM.....	Mint- £2,750
50mm F1.2 L USM.....	E++ / Mint- £765 - £799
50mm F1.4 USM.....	E++ £189
50mm F1.8 EF II.....	As Seen / E++ £35 - £59
50mm F1.8 EF Mk1.....	E++ £99 - £115
50mm F2.5 EF Macro.....	E++ £149
55-200mm F4.5-5.6 IS STM (M).....	E++ £169
55-250mm F4-5.6 EFS IS II.....	Mint- £119
60mm F2.8 EFS Macro.....	E++ / Mint- £239 - £249
70-200mm F2.8 L IS USM II.....	E++ £1,189
70-200mm F2.8 SP LD Tamron.....	E+ £269
70-200mm F4 L IS USM.....	Mint- £599
70-200mm F4 L USM.....	E+ / E++ £289 - £329
70-210mm F3.5-4.5 Apo Sigma.....	Unused £69
70-300mm F4-5.6 Di VC USD Tamron.....	Mint- £189
70-300mm F4-5.6 LD Tamron.....	E++ £49
70-300mm F4.5-5.6 DO IS USM.....	E+ / Mint- £299 - £449
75-300mm F4-5.6 IS USM.....	E+ / E++ £189 - £199
75-300mm F4-5.6 USM III.....	E+ / E++ £59 - £79
80-200mm F4.5-5.6 EF II.....	E++ £39
80-200mm F4.5-5.6 EF III.....	E+ / E++ £39 - £49
80-200mm F4.5-5.6 USM.....	E++ £49
85mm F1.2 L USM.....	E+ £799
85mm F1.2 L USM MkII.....	E++ £949
85mm F1.8 USM.....	Mint- £199
90mm F2.8 SP AF Macro Tamron.....	E+ / E++ £159 - £219
100-400mm F4.5-5.6 L IS USM.....	E+ / E++ £639 - £679
100mm F2.8 L Macro IS USM.....	E++ / Mint £489 - £549
100mm F2.8 USM Macro.....	E+ / Mint- £239 - £299
180mm F3.5 Di Macro Tamron.....	E+ £299
300mm F2.8 ATX SD.....	E+ £599
300mm F2.8 L IS USM.....	Exc £1,789
300mm F4 L IS USM.....	E+ £549 - £589
300mm F4 L USM.....	Exc / E+ £389
400mm F2.8 L IS USM.....	E+ / Mint- £3,799 - £3,989
400mm f4 DO IS USM.....	E++ £2,899
400mm f5.6 L USM.....	E+ £679
600mm F4 L IS USM.....	E++ £5,199
600mm F4 L USM.....	Exc / E+ £2,485 - £2,889

### Canon EOS Fit Converters

Canon 1.4x EF MkII Extender.....	Mint- £189
1.4x EF MkIII Extender.....	Mint- £249
2x EF Extender.....	As Seen / E++ £79 - £159
2x EF II Extender.....	E++ / Mint- £169 - £179
2x EF MkII Extender.....	E+ / E++ £149 - £155
2x EF MkIII Extender.....	Mint- £239
Sigma 1.4x AF Tele Converter.....	E+ £59
1.4x Apo EX Converter.....	E++ £99
1.4x Apo EX DG Converter.....	E++ £99
1.5x Converter Kenko.....	Mint- £39
1.5x Converter Teleplus.....	Unused £45
1.5x DG Converter Kenko.....	E++ £45
2x Converter Soligor.....	E+ £39
2x DGII Converter Bower.....	Mint- £49
2x MC7 Converter Teleplus.....	E++ / Unused £35 - £49
Extension Tube Set 12/20/36 Triplus.....	Mint £69
Extension Tube Set 12/20/36 AF Kenko.....	E++ £69

### Canon EOS Fit Sigma Lenses

10-20mm F4-5.6 DC HSM.....	E+ / Mint- £219 - £239
12-24mm F4.5-5.6 EX DG HSM.....	E+ / E++ £259 - £299
17-70mm F2.8-4 DC OS Macro HSM.....	Mint- £219
17-70mm F2.8-4 DC OS Macro HSM.....	E++ £219
18-250mm F3.5-6.3 DC OS HSM.....	E++ £179
28-70mm f2.8 EX DG.....	E+ £129
28mm F1.8 AF.....	Unused £99
30mm F1.4 EX DC HSM.....	E++ £189
50-500mm F4-6.3 Apo DG HSM.....	E++ £499
500mm F4.5 Apo EX HSM.....	E+ £1,739

50mm F2.8 EX DG Macro.....	E++ £149
70-200mm F2.8 EX APO HSM.....	E+ £219
70-300mm F4-5.6 DG.....	E++ £59
70mm F2.8 EX DG Macro.....	E++ £179
120-400mm F4.5-5.6 Apo DG OS HSM.....	E++ £399
150mm F2.8 EX DG Macro HSM.....	E++ £299 - £319
170-500mm F5-6.3 Apo.....	E+ £149
180mm F3.5 EX Macro APO.....	E++ £349
300mm F2.8 Apo.....	Unused £299
300mm F2.8 Apo DG HSM.....	E++ £1,289 - £1,299
300mm F2.8 APO EX DG HSM.....	E++ £1,499
300mm F4 Apo.....	E+ / E++ £369 - £489
400mm F5.6 AF.....	E+ £79
400mm F5.6 Apo.....	E+ £79 - £125
USB Dock V0-01EO - Canon.....	Mint- £29

### Contax 645 Lenses

35mm F3.5 Distagon.....	Exc / Mint- £399 - £949
45-90mm F4.5 Vario.....	E+ / E++ £1,299 - £1,499
45mm F2.8 Distagon.....	E+ / E++ £369 - £489
120mm F4 Apo Macro.....	E+ / E++ £549 - £899
140mm F2.8 Sonnar.....	E+ / Mint- £349 - £599
210mm F4 Sonnar.....	E+ / Mint- £349 - £499
350mm F4 Tele Apo Tessar.....	E++ £3,999
1.4x Mutar Converter.....	Mint- £499

### Contax SLR Lenses

25mm F2.8 MM.....	E+ £299
28-70mm F3.5-4.5 MM.....	E++ £249
28-80mm F3.5-5.6 AF.....	Unused / New £349 - £399
28mm F2 AE.....	E++ £449
35-70mm F3.4 MM.....	E+ £249
35mm F2.8 MM.....	E+ £139
45mm F2.8 AE.....	E+ £149
45mm F2.8 MM.....	E++ £199
50mm F1.4 AF.....	E++ £449
50mm F1.7 AE.....	E+ / E++ £75 - £99
50mm F1.7 MM.....	E++ £129
60mm F2.8 AE Macro.....	E++ £279
70-200mm F4-5.6 AF.....	E++ £449
70-300mm F4-5.6 AF.....	E++ / Unused £399 - £649
80-200mm F4 MM.....	E++ £179
100mm F2 AE.....	E++ £549
100mm F3.5 AE.....	E+ £179
100mm F4 S Planar.....	E++ £649
135mm F2 (60 Year Edition).....	Unused £2,399
135mm F2.8 MM.....	E+ £169
180mm F2.8 AE.....	Unused £549
180mm F2.8 MM.....	E++ £349
200mm F3.5 AE.....	E+ / E++ £129 - £149
200mm F4 AE.....	E++ / Unused £179 - £449
200mm F4 MM.....	E++ £189
300mm F4 AE.....	E+ £249

### Digital SLR Cameras

Canon EOS 1000D Body Only.....	E++ £119
EOS 100D Body Only.....	Mint- £219
EOS 10D + BG-ED3 Grip.....	As Seen £69
EOS 1D MkII Body Only.....	As Seen £199
EOS 1D MKIIN Body Only.....	As Seen £249
EOS 1D MKIV Body Only.....	E+ / Mint- £1,345 - £1,499
EOS 1D MkII Body Only.....	E+ £2,749
EOS 300D Body Only.....	As Seen £45 - £49
EOS 30D Body Only.....	As Seen £79
EOS 400D Body Only.....	As Seen / E++ £69 - £89
EOS 40D + BG-E2 Grip.....	E++ £149
EOS 450D Body Only.....	E+ £79
EOS 500D Body Only.....	E+ £165
EOS 50D + BG-E2 Grip.....	E+ £245
EOS 5D MkII Body Only.....	E++ £849
EOS 5D MkIII Body Only.....	Mint- £1,599
EOS 60D Body Only.....	E+ £299
EOS 70D Body Only.....	E+ £549
EOS 750D Body Only.....	Mint £359
EOS 7D Body Only.....	E++ / Mint- £399
EOS M3 + 18-55mm.....	Mint- £299
EOS M3 + 18-55mm + DC1 Finder.....	Mint- £379

Nikon D100 Body Only.....	E+ £79
D200 + MB-D200 Grip.....	E++ £189
D200 Body Only.....	As Seen / E++ £149 - £179
D3 Body Only.....	As Seen £399
D300 Body Only.....	E+ £199
D3100 Body Only.....	E++ £129
D3S Body Only.....	E+ £1,749
D3X Body Only.....	E+ £1,189
D4 Body Only.....	E++ £2,249
D50 Body Only.....	As Seen £49
D5000 Body Only.....	E++ £129

D5300 Body Only.....	Mint- £269 - £289
D5500 + 18-140mm.....	Mint- £559
D70 Body Only.....	As Seen / E+ £49 - £79
D800 Body Only.....	E+ / Mint- £989 - £1,179
D800E Body Only.....	E++ £1,179
D90 Body Only.....	E++ £179

### Hasselblad H Lenses

28mm F4 HCD.....	E++ / Mint- £2,149 - £2,450
35-90mm F4-5.6 HC.....	Mint- £3,750
35mm F3.5 HC.....	Exc £999
50-110mm F3.5-4.5 HC.....	Exc / E+ £999 - £1,495
50mm F3.5 HC.....	E+ / Mint £1,199 - £1,399
120mm F4 HC Macro.....	Exc / E++ £999 - £1,549
150 Filter Hood + 150x170 ND8 Grad (Hasselblad H).....	Mint- £199
150mm F3.2 HC.....	E+ / E++ £989 - £1,189
210mm F4 HC.....	E+ £1,249
1.5x HTS Tilt/Shift Converter.....	Mint- £2,495
1.7x H Converter.....	E++ £549

### Mamiya RB67 Lenses

50mm F4.5 C.....	E+ £149
140mm F4.5 C Macro.....	As Seen £79
150mm F4 C Soft Focus.....	E+ £129
180mm F4.5 C.....	As Seen £75 - £99
180mm F4.5 KL-A.....	E++ £149 - £169
250mm F4.5.....	As Seen £99
250mm F4.5 C.....	As Seen £89
2x Converter Vivitar.....	E+ £35
2x MC6 Converter Teleplus.....	E++ £35

### Mamiya RZ67 Lenses

50mm F4.5.....	Exc £350
65mm F4 L-A.....	E+ / E++ £249 - £299
75mm F4.5 Shift W.....	E+ £399
100-200mm F5.2 W.....	E+ / E++ £219 - £399
140mm F4.5 Macro W.....	As Seen £79
180mm F4.5 L SB.....	E++ £249
180mm F4.5 W.....	As Seen / E++ £89 - £129
180mm F4.5 WN.....	As Seen / E++ £89 - £149
250mm F4.5.....	Exc / E+ £129
1.4x Converter.....	Exc / E++ £119 - £199

### Minolta / Sony AF Lenses

Sony 11-18mm F4.5-5.6 DT.....	E++ £269
16-105mm F3.5-5.6 DT.....	E++ £189 - £299
16-50mm F2.8 DT SSM.....	E+ £289
16-80mm F3.5-4.5 ZA.....	E+ £259
18-250mm F3.5-6.3 DT.....	E++ £279
18-55mm F3.5-5.6 SAM.....	E+ / E++ £49 - £59
20mm F2.8 AF.....	Mint- £299
24-70mm F2.8 ZA SSM.....	E++ £749
30mm F2.8 SAM Macro.....	E++ / Mint- £89 - £99
50mm F1.4 AF.....	E+ / E++ £149 - £179
50mm F1.8 DT.....	E+ / E++ £59
55-200mm F4-5.6 DT.....	E++ £79
85mm F1.4 ZA.....	E++ £749
70-300mm F4.5-5.6 G SSM.....	E++ / Mint- £439 - £489
75-300mm F4.5-5.6 AF.....	E++ / Mint- £79 - £89
100mm F2.8 D Macro.....	E++ £389
500mm F8 Reflex.....	E++ £499
Minolta 18-200mm F3.5-6.3 DT.....	E+ £99
28-75mm F2.8 D.....	E++ £149
28-80mm F3.5-5.6.....	E+ £25
28mm F2.8 AF.....	E++ £79
35-70mm F3.5-4.5 AF.....	E+ / E++ £25 - £29
50mm F1.4 AF.....	E+ £149
50mm F2.8 AF Macro.....	E+ £119
70-210mm F4 AF.....	E+ / E++ £99
75-300mm F4.5-5.6 AF.....	E++ £39
75-300mm F4.5-5.6 D.....	E+ / E++ £39 - £49
80-200mm F4.5-5.6 AF.....	E+ £39
100-300mm F4.5-5.6 AF.....	E+ / E++ £79 - £89
100-400mm F4.5-6.7 Apo AF.....	E+ £249
300mm F4 G Apo.....	Mint- £649
19-35mm F3.5-4.5 MC Cosina.....	E++ £59
Tamron 60mm F2 Di II (if) Macro.....	New £269
70-300mm F4-5.6 Di.....	E++ £49
17-50mm F2.8 Di II.....	E++ £179
24-70mm F2.8 Di VC USD.....	E++ / Mint- £539
28-200mm F3.5-6.3 XR Di.....	E+ £49
80-210mm F4.5-5.6 AF.....	E+ £29
200-400mm F5.6 LD.....	E+ £189
24mm F1.4 ED AS UMC Samyang.....	E++ £329
28-105mm F4-5.6 Series 1 Vivitar.....	E++ £49

### Sony Fit Sigma Lenses

18-12
-------





Prices  
correct when  
compiled.  
E&OE.

T: 01463 783850

E: [info@ffordes.com](mailto:info@ffordes.com)



**WANTED  
YOUR EQUIPMENT**

- COMMISSION SALE
  - PART EXCHANGE
  - BUY FOR CASH
- 35MM, MEDIUM  
FORMAT, LARGE  
FORMAT, DIGITAL

20mm F1.8 EX DG .....	E++	£260
28-200mm F4-5.6 .....	E+	£39
28mm F1.8 EX DG .....	E/E++	£139-£199
50mm F2.8 DG Macro.....	E++	£109
70-300mm F4-5.6 DG .....	E++	£49
70-300mm F4-5.6 Apo DG Macro.....	E+	£49
70-300mm F4-5.6 DG Macro.....	E++	£59
8-16mm F4.5-5.6 DC HSM .....	E++	£299
85mm F1.4 EX DG HSM .....	E++	£489
135-400mm F4.5-5.6 Apo.....	E+	£179
150-500mm F5-6.3 APO DG OS HSM .....	E++	£429

#### Nikon AF Fit Lenses

10-17mm F3.5-4.5 DX Fish Eye Tokina .....	E+	£319
11-16mm F2.8 ATX Pro DX Tokina .....	E++	£279
12-24mm F4 ATX PRO SD Tokina .....	E++	£199 - £329
12-24mm F4 G AFS DX ED .....	E++	£389
14-24mm F2.8 G AFS ED .....	E+ / E++	£839 - £929
16-85mm F3.5-5.6 G ED VR AFS DXE+ / E++	£229 - £329	
17-35mm F2.8 ED AFS .....	E+	£549
17-35mm F4 AT-X Pro FX Tokina.....	E++	£349
17-55mm F2.8 G AFS DX IFED.....	E++	£349 - £399
18-140mm F3.5-5.6 AF-S G ED VR DX. Mint-	£259 - £279	
18-300mm F3.5-5.6 AFS DX VR.....	Mint	£399
18-35mm F3.5-4.5 AFD.....	Mint-	£249
18-55mm F3.5-5.6 G AFS VR.....	E++ / Mint-	£79
18mm F2.8 AFD.....	E++	£599
18mm F3.5 ZF.2 Zeiss .....	E++	£699
20-35mm F2.8 AFD .....	E+	£349 - £449
20-35mm F2.8 ATX Pro Tokina.....	E++	£225
200mm F2 G AFS VR.....	E++	£2,199
20mm F2.8 AFD.....	E+ / E++	£269 - £349
20mm F3.5 Color Skopar SLII Voigtlander .....	Mint-	£279
21mm F2.8 ZF Zeiss .....	E++	£729
24-120mm F4 AFS G ED VR .....	Mint-	£499
24-70mm F2.8 G AFS ED .....	E+	£749
24-70mm F3.5-5.6 IX.....	E+	£39
24-85mm F3.5-4.5 G ED VR .....	E++	£279
24mm F1.4 AE ED AS UMC Samyang .....	Mint-	£369
24mm F1.4 G AFS ED .....	E+ / E++	£879 - £899
25mm F2 ZF.2 Zeiss .....	Mint-	£899
25mm F2.8 ZF Zeiss .....	E++ / Mint-	£399 - £449
25mm F2.8 ZF.2 Zeiss .....	E++	£499
28-100mm F3.5-5.6 AFG.....	E++	£59
28-105mm F3.5-4.5 AFD.....	E+	£109 - £129
28-80mm F3.3-5.6 AFG.....	E+	£35 - £39
28mm F2.8 AF .....	E++	£139
28mm F2.8 AFD.....	E+ / E++	£159 - £169
35-70mm F2.8 AFD .....	E+ / E++	£159 - £399
35mm F1.4 AE AS UMC Samyang .....	E+	£279
35mm F1.4 ZF.2 Zeiss .....	E++ / Mint-	£929 - £949
35mm F1.8 G AFS DX .....	E++	£109
35mm F2 AFD.....	E++	£149
35mm F2 ZF.2 Zeiss .....	Mint-	£599
35mm F2.8 Macro DX ATX Tokina .....	E++	£229
45mm F2.8 D PC-E ED Macro.....	E++	£1,089
50-135mm F2.8 DX ATX Pro Tokina .....	E++	£329
50mm F1.4 AFD.....	E+ / Mint-	£159 - £179
50mm F1.4 Milvus ZF.2 Zeiss .....	Mint-	£749
50mm F1.4 ZF.2 Zeiss .....	E++	£399
50mm F1.8 AFD.....	E+ / E++	£65 - £79
50mm F1.8 G AFS (Retro) .....	Mint-	£159
55-200mm F4-5.6 AFS DX G VR .....	E++	£99
55-200mm F4-5.6 AFS VR DX G .....	Mint-	£109
55-200mm F4-5.6 Di II .....	E+ / E++	£39
55-300mm F4.5-5.6 G AFS VR .....	E+	£149
55mm F1.4 Otis Apo Distagon ZF.2 Zeiss .....	E++	£2,249
60-180mm F4-5.6 IX .....	E++	£49
60mm F2.8 AFD Micro .....	E++	£199
60mm F2.8 AFS ED Micro .....	E+	£239
70-180mm F4.5-5.6 AFD Micro .....	E++	£889
70-200mm F2.8 G AFS ED VR II .....	E++	£1,179
70-210mm F4-5.6 AFN .....	E+	£79
70-300mm F4-5.6 AF LD Tamron .....	E++	£49
70-300mm F4-5.6 G AFS VR.....	Mint- / Mint	£319 - £349
75-240mm F4.5-5.6 AFD.....	E+ / E++	£49 - £59
80-200mm F2.8 ED AFD.....	E+	£449
80-210mm F4.5-5.6 Tamron .....	E+	£39
80-400mm F4.5-5.6 ATX D Tokina .....	E++	£199
85mm F1.4 AFD.....	E+ / E++	£469 - £549
85mm F1.4 G AFS.....	E++	£979
85mm F1.4 ZF Zeiss .....	Mint-	£649
85mm F1.4 ZF.2 Zeiss .....	E++	£749
85mm F1.8 AFD.....	E++	£229
90mm F2.8 SP Di Macro Tamron Exc / Mint-	£189 - £199	
90mm F4.5 PC-TS Makro Schneider .....	E++	£1,589
105mm F2 AF DC .....	E++	£529
105mm F2.8 AFD Micro .....	E++	£349 - £389

135mm F2 Apo ZF.2 Zeiss.....	Mint-	£1,099
135mm F2 D AF DC .....	Mint-	£799
200-400mm F4 G AFS VR II.....	Mint-	£3,499
200-400mm F4 G VR AFS IFED E+ / E++	£1,899 - £2,499	
200-400mm F5.6 AF LD Tamron .....	E++	£169
300mm F2.8 G AFS ED VR .....	E+ / E++	£2,299 - £2,449
300mm F2.8 G AFS ED VR II... E+ / Mint-	£2,799 - £3,189	
300mm F2.8 IF ED AFS.....	E++	£1,849
300mm F2.8 IFED AF-I .....	E++	£1,599
300mm F2.8 IFED AFS II .....	E+	£1,789
300mm F4 AFS IFED .....	E+ / E++	£589 - £599
500mm F4 AFS IFED .....	E+	£2,599
500mm F4 G AFS VR IF ED.....	E+	£4,489
500mm F4 P IFED AIS + TC16A Converter .....	E+	£1,049

#### Nikon AF Teleconverters

TC-14E Converter .....	E++	£149
TC-20 EII AFS Converter.....	E++	£179
TC-20 EIII AFS Converter .....	Mint-	£249 - £269
TC-20E Converter .....	E++	£119
TC-20EII Converter.....	E+ / E++	£159 - £179
2x Converter Pro300 - Kenko .....	E++	£79
2x MC7 Converter Teleplus .....	E++	£45
Extension Tube Set 12/20/36 DG Kenko E++ / Mint	£69 - £79	

#### Nikon AF Fit Sigma Lenses

18-250mm F3.5-5.6 DC OS.....	Mint-	£179
18-35mm F1.8 DC HSM A.....	E++	£399
18-50mm F2.8 EX DC .....	E+	£115
18-50mm F2.8 EX DC Macro .....	E++	£129
24-70mm F2.8 EX DG .....	E++	£189
50-150mm F2.8 Apo HSM II.....	E+	£329
50-500mm F4-6.3 Apo DG HSM ...E+ / E++	£399 - £499	
75-300mm F4-5.6 Apo .....	E++	£79
85mm F1.4 EX DG HSM.....	E+	£419
105mm F2.8 EX DG Macro .....	E++	£199
135-400mm F4.5-5.6 Apo D.....	E++	£179
150-600mm F5-6.3 DG OS HSM Sport .....	Mint-	£989
1.4x Apo EX Converter .....	E++	£99

#### Nikon Manual Lenses

10.5cm F4 Nikkor T .....	E+	£499
18mm F3.5 AIS.....	E++	£389
20mm F2.8 AIS.....	E+ / E++	£269 - £299
20mm F3.5 Non AI .....	E+	£129
24mm F2 AIS.....	E++	£399
25-50mm F4 AIS .....	E+	£179
28mm F3.5 AI .....	E+ / E++	£59 - £89
28mm F3.5 AIS.....	As Seen	£79
28mm F3.5 Non AI .....	E+	£59
28mm F3.5 PC Shift.....	E+ / E++	£299 - £349
35-105mm F3.5-4.5 AIS .....	E++	£59
35-135mm F3.5-4.5 AIS .....	E+	£99
35mm F1.4 AIS.....	E++	£489
35mm F2 AIS.....	E+	£149
35mm F2.8 AIS.....	E+	£99
43-86mm F3.5 AI .....	E+	£49
50-300mm F4.5 AI .....	E+	£379
50-300mm F4.5 ED AIS .....	E+	£449
50mm F1.2 AIS.....	Mint-	£549
50mm F1.4 AIS.....	Exc	£119
50mm F1.8 AIS.....	E+	£59
50mm F1.8 Series E .....	E+	£49
55mm F2.8 AIS Micro .....	E++	£129
55mm F3.5 AI Micro .....	Exc	£49
58mm F1.4 Nokton SLII Voigtlander .....	E++	£329
80-200mm F2.8 ED AIS .....	E++	£1,999
80-200mm F4 AIS .....	E++	£219
80-200mm F4.5 AI .....	E+	£69
100mm F2.8 Series E .....	E+	£89
200mm F2 IFED AIS.....	E+ £949 - £1,499	
300mm F2.8 AI .....	Exc	£249
300mm F2.8 IFED AIS.....	Exc	£499
300mm F4.5 AI .....	Exc	£99
300mm F4.5 Non AI.....	E+	£125
400mm F4.5 Nikkor-Q Auto .....	E++	£750
400mm F5.6 ED AI .....	E+	£589
400mm F5.6 IFED AIS.....	Exc	£399
500mm F8 Reflex .....	E+ / E++	£249 - £289
500mm F8 Reflex C.....	E+ £179 - £199	
600mm F5.6 IFED AIS.....	E+	£1,039
800mm F5.6 IFED AIS.....	E+	£1,499

#### Olympus OM Lenses

18mm F3.5 Zuiko .....	E+	£449
24mm F2.0 Zuiko .....	E+	£269
28mm F2.8 Zuiko .....	E+ / E++	£49 - £59
28mm F3.5 Zuiko .....	E+	£39
35-70mm F3.5-4.5 Zuiko .....	Exc	£29
35mm F2.8 Zuiko .....	E+	£49



**WE: BUY FOR  
CASH  
PART EXCHANGE  
COMMISSION SALE**

**WE WANT YOUR QUALITY PRE-OWNED EQUIPMENT**  
**Nikon Manual Bodies & Lenses, Bronica ETR/Si**  
**Bodies & Lenses, Bronica SQA/Ai Bodies & Lenses,**  
**Hasselblad V Bodies & Lenses, Mamiya RZ67,**  
**Mamiya RB67, 645, 7/ 7II, Fuji 645, All Digital SLR,**  
**All Digital Compacts, Nikon AF Lenses, Canon AF**  
**Lenses, Fuji X System, Micro 4/3rds, Olympus OM,**  
**Canon FD, Leica M System Film & Digital,**  
**Leica R System.**

**: Film or Digital**

**: Auto or Manual  
Focus**

**: Medium or  
Large Format**

**COMPETITIVE QUOTES**

**PROMPT DECISIONS**

Within 24 hours  
Mon-Fri

**WE CAN COLLECT**

Ask for details

**IN THE FIRST INSTANCE**  
**Please ring 01463 783850**  
**or email [info@ffordes.com](mailto:info@ffordes.com)**  
**FOR A QUOTE**

The ORIGINAL commission sale specialists. We also PART EXCHANGE and BUY FOR CASH





## Lowering the cost of printing...

We are a small, family owned and run company, specialising in photographic consumables – and proud winners of multiple Good Service Awards. We are located in Leamington Spa, in the heart of Warwickshire. If you're passing, please pop into our shop and meet Cooper – our office dog!

01926 339977 [www.premier-ink.co.uk](http://www.premier-ink.co.uk)

## Ink Cartridges

We carry one of the largest ranges of printer ink cartridges in the UK, with cartridges in stock for practically every inkjet printer. We always stock **Original** cartridges, which are made by your printer manufacturer, and in many cases we also offer **Compatible** cartridges, which are usually made by a UK company called **Jet Tec**. Using **Jet Tec Compatibles** is a way of saving money, without compromising on the quality of your prints.

Here are the results from two independent ink tests that agree...

"Jet Tec's colours were superb, with single greys and blacks very close to Epson... so Jet Tec wins!"  
- Total Digital Photography Magazine

"What we're looking at here is not only the best choice of ink for the R300 printer, but also the best choice of ink in this group test, period. There's just no getting away from the superb combination of performance and pricing."  
- Computer Upgrade Magazine



## Canon

**PGi29 Pixma Pro 1**  
Originals:  
Set of 12 Colours 36ml each  
**£249.99**  
**£21.99**

**PGi72 Pixma Pro 10**  
Originals:  
Set of 10 Colours 14ml each  
**£99.99**  
**£10.99**

**CLi42 Pixma Pro 100**  
Originals:  
Set of 8 Colours 13ml each  
**£83.99**  
**£10.99**  
**Compatibles:**  
Set of 8 Colours 14ml each  
**£27.99**  
**£3.99**

**CLi8 Pixma Pro 9000**  
Originals:  
Set of 8 Colours 14ml each  
**£83.99**  
**£10.99**  
**Compatibles:**  
Set of 8 Colours 14ml each  
**£27.99**  
**£3.99**

**PGi9 Pixma Pro 9500**  
Originals:  
Set of 10 Colours 14ml each  
**£107.99**  
**£10.99**  
**Compatibles:**  
Set of 10 Colours 14ml each  
**£44.99**  
**£4.99**

### More Canon Inks...

**PGi520/CLi521** Set of 5  
**PGi520** Black 19ml **£49.99**  
**CLi521** Colours 9ml **£11.99**  
**PGi525/CLi526** Set of 5  
**PGi525** Black 19ml **£49.99**  
**CLi526** Colours 9ml **£11.99**  
**PGi550/CLi551** Set of 5  
**PGi550** Black 15ml **£43.99**  
**CLi551** Colours 7ml **£10.99**  
**PGi550/CLi551XL** Set 5  
**PGi550XL** Black 22ml **£59.99**  
**CLi551XL** Colours 11ml **£12.99**  
**PG540** Black 8ml **£11.99**  
**PG540XL** Black 21ml **£19.99**  
**CL541** Colour 8ml **£16.99**  
**CL541XL** Colour 15ml **£19.99**  
**PG545XL** Black 15ml **£15.49**  
**CL546XL** Colour 13ml **£16.99**

**Compatibles:**  
**PGi5** Black 27ml **£4.99**  
**CLi8** Colours 13ml **£3.99**  
**PGi5/CLi8** Set of 5 **£19.99**  
**PGi520/CLi521** Set of 5 **£49.99**  
**CLi526** Colours 9ml **£11.99**  
**PGi525/CLi526** Set of 5 **£49.99**  
**PGi550XL** Black 25ml **£4.99**  
**CLi551XL** Colours 12ml **£3.99**  
**PGi550/CLi551XL** Set 5 **£19.99**  
**BCi6** Colours 15ml **£2.99**  
**PG40** Black 28ml **£12.99**  
**CL41** Colour 24ml **£16.99**  
**PG50** Black 28ml **£12.99**  
**CL51** Colour 24ml **£14.99**  
**PG510** Black 11ml **£13.99**  
**CL511** Colour 11ml **£15.99**  
**PG512** Black 18ml **£13.99**  
**CL513** Colour 15ml **£15.99**  
**PG540XL** Black 21ml **£13.99**  
**CL541XL** Colour 15ml **£14.99**  
**PG545XL** Black 15ml **£11.99**  
**PG546XL** Black 21ml **£12.99**

Many more in stock!

## EPSON

**No.16 Fountain Pen Inks**  
Originals:  
No.16 Set of 4 **£28.99**  
No.16 Black 5.4ml **£8.99**  
No.16 Colours 3.1ml each **£6.99**  
No.16XL Set of 4 **£53.99**  
No.16XL Black 12.9ml **£15.99**  
No.16XL Colours 6.5ml each **£12.99**

**Compatibles:**  
No.16 Set of 4 **£14.99**  
No.16 Black 12ml **£3.99**  
No.16 Colours 12ml each **£3.99**

**No.18 Daisy Inks**  
Originals:  
No.18 Set of 4 **£30.99**  
No.18 Black 5.2ml **£8.99**  
No.18 Colours 3.3ml each **£7.49**  
No.18XL Set of 4 **£54.99**  
No.18XL Black 11.5ml **£16.99**  
No.18XL Colours 6.6ml each **£12.99**

**Compatibles:**  
No.18 Set of 4 **£14.99**  
No.18 Black 12ml **£3.99**  
No.18 Colours 12ml each **£3.99**

**No.24 Elephant Inks**  
Originals:  
No.24 Set of 6 **£52.99**  
No.24 Colours 4.6ml each **£8.99**  
No.24XL Set of 6 **£87.99**  
No.24XL Colours 8.7ml each **£14.99**

**Compatibles:**  
No.24 Set of 6 **£22.99**  
No.24 Black 7ml **£3.99**  
No.24 Colours 7ml each **£3.99**

**No.26 Polar Bear Inks**  
Originals:  
No.26 Set of 4 **£35.99**  
No.26 Black 6.2ml **£9.99**  
No.26 Colours 4.5ml each **£8.99**  
No.26XL Set of 4 **£63.99**  
No.26XL Black 12.1ml **£16.99**  
No.26XL Colours 9.7ml each **£15.99**

**Compatibles:**  
No.26 Set of 4 **£14.99**  
No.26 Black 10ml **£3.99**  
No.26 Colours 7ml each **£3.99**

**T0481-T0486 Seahorse Inks**  
Originals:  
Set of 6 Colours 13ml each **£89.99**  
**£18.99**  
**Compatibles:**  
Set of 6 Colours 13ml each **£19.99**  
**£3.99**

**T0541-T0549 Frog Inks**  
Originals:  
Set of 8 Colours 13ml each **£112.99**  
**£14.99**  
**Compatibles:**  
Set of 8 Colours 13ml each **£27.99**  
**£3.99**

More Epson inks >>>

## Albums & Frames

We now stock a comprehensive range of frames, mounts, albums and accessories. The full range can be viewed on our website, with detailed close-up images of each product to help you choose the perfect way to display your printed photographs. Below is just a tiny sample of what we offer:

**Grace Albums**  
Available in Burgundy or Blue.

**Travel Albums**  
Over a dozen designs in stock.

**Grafton Albums**  
Available in Burgundy or Blue.

**Baby Albums**  
Multiple different designs available.

**Emilia Frames**  
Distressed wood shabby chic effect. Blue or White.

**Rio Frames**  
Handcrafted solid wood with 30mm wide profile, in four colours.

**Frisco Frames**  
Simple, basic design available in a huge range of sizes & colours.

**Plastic Bevel, Glass Front:**  
**Frisco 6x4** seven colours **£1.99**  
**Frisco 7x5** seven colours **£2.29**  
**Frisco 8x6** seven colours **£2.79**  
**Frisco 9x6** seven colours **£3.49**  
**Frisco 10x8** seven colours **£3.79**  
**Frisco 12x8** seven colours **£4.59**  
**Frisco A4** seven colours **£3.99**  
**Frisco A3** seven colours **£8.99**

**Memo Style Albums:**  
**Grace 6x4** 100 photos **£5.99**  
**Grace 6x4** 200 photos **£9.99**  
**Grace 6x4** 300 photos **£14.99**  
**Grace 7x5** 100 photos **£7.99**  
**Grace 7x5** 200 photos **£13.99**  
**Grace A4** 100 photos **£15.99**  
**Grafton 6x4** 200 photos **£9.99**  
**Grafton 7x5** 200 photos **£13.99**  
**Baby 6x4** 200 photos **£9.99**  
**Travel 6x4** 200 photos **£8.99**

**Traditional Style Albums:**  
**Grace 29x32cm** 100 pages **£14.99**  
**Grafton 29x32cm** 100 pgs **£14.99**  
**Baby 29x32cm** 100 pages **£12.99**

**Accessories:**  
**Photo Corners** Pack of 250 **£2.99**  
**Photo Stickers** Pack of 500 **£1.99**

## More Ink Cartridges...

## EPSON

**T0711-T0714 Cheetah Inks**  
Originals:  
Set of 4 Black 7.4ml **£42.99**  
Colours 5.5ml each **£10.99**  
**Compatibles:**  
Set of 4 Black 7.4ml **£14.99**  
Colours 5.5ml each **£4.99**  
**£3.99**

**T0791-T0796 Owl Inks**  
Originals:  
Set of 6 Colours 11.1ml each **£88.99**  
**£14.99**  
**Compatibles:**  
Set of 6 Colours 11.1ml each **£19.99**  
**£3.99**

**T0801-T0806 Hummingbird Inks**  
Originals:  
Set of 6 Colours 7.4ml each **£67.99**  
**£11.49**  
**Compatibles:**  
Set of 6 Colours 7.4ml each **£19.99**  
**£3.99**

**T0871-T0879 Flamingo Inks**  
Originals:  
Set of 8 Colours 11.4ml each **£76.99**  
**£9.99**  
**Compatibles:**  
Set of 8 Colours 11.4ml each **£27.99**  
**£3.99**

**T0961-T0969 Husky Inks**  
Originals:  
Set of 8 Colours 11.4ml each **£78.99**  
**£9.99**  
**Compatibles:**  
Set of 8 Colours 11.4ml each **£27.99**  
**£3.99**

**T1571-T1579 Turtle Inks**  
Originals:  
Set of 8 Colours 25.9ml each **£166.99**  
**£20.99**  
**Compatibles:**  
Set of 8 Colours 25.9ml each **£187.99**  
**£20.99**

**T7601-T7609 Killer Whale**  
Originals:  
Set of 9 Colours 25.9ml each **£187.99**  
**£20.99**



**Originals:**  
**No.38** Colours 27ml each **£29.99**  
**No.62XL** Black 12ml **£24.99**  
**No.62XL** Colour 11.5ml **£28.99**  
**No.300** Black 4ml **£12.99**  
**No.300** Colour 4ml **£14.99**  
**No.301** Black 3ml **£10.99**  
**No.301** Colour 3ml **£13.49**  
**No.301** Black+Colour 3ml **£19.99**  
**No.301XL** Black 8ml **£22.99**  
**No.301XL** Colour 6ml **£22.99**  
**No.302XL** Black 8ml **£21.99**  
**No.302XL** Black 8ml **£21.99**  
**No.350** Black 4.5ml **£14.99**  
**No.351** Colour 3.5ml **£17.99**  
**No.363** SET OF 6 **£49.99**  
**No.364** Black 6ml **£8.99**  
**No.364** PB/C/M/Y 3ml each **£7.99**  
**No.364** SET OF 4 **£26.99**  
**No.364XL** Black 14ml **£15.99**  
**No.364XL** PB/C/M/Y 6ml each **£15.99**  
**No.364XL** SET OF 4 **£59.99**  
**No.920XL** SET OF 4 **£51.99**  
**No.932XL** SET OF 4 **£50.99**  
**No.950XL** SET OF 4 **£79.99**

**Compatibles:**  
**No.15** Black 46ml **£3.99**  
**No.21** Black 10ml **£6.99**  
**No.22** Colour 21ml **£11.99**  
**No.45** Black 45ml **£6.99**  
**No.56** Black 24ml **£6.99**  
**No.57** Colour 24ml **£11.99**  
**No.62XL** Black 12ml **£14.99**  
**No.62XL** Colour 12ml **£15.99**  
**No.78** Colour 36ml **£8.99**  
**No.110** Colour 12ml **£9.99**  
**No.300XL** Black 18ml **£12.99**  
**No.300XL** Colour 18ml **£13.99**  
**No.301XL** Black 15ml **£12.99**  
**No.301XL** Colour 18ml **£13.99**  
**No.337** Black 21ml **£9.99**  
**No.338** Black 21ml **£10.99**  
**No.339** Black 34ml **£11.99**  
**No.343** Colour 21ml **£11.99**  
**No.344** Colour 21ml **£12.99**  
**No.350XL** Black 30ml **£13.99**  
**No.351XL** Black 20ml **£15.99**  
**No.363** SET OF 6 **£19.99**  
**No.364** Black 10ml **£3.79**  
**No.364** Colours 5ml each **£3.29**  
**No.364** SET OF 4 **£12.99**  
**No.364XL** Black 18ml **£4.99**  
**No.364XL** Colours 11ml each **£4.29**  
**No.364XL** SET OF 4 **£16.99**  
**No.920XL** SET OF 4 **£19.99**  
**No.932XL** SET OF 4 **£29.99**  
**No.940XL** SET OF 4 **£29.99**  
**No.950XL** SET OF 4 **£29.99**

Many more in stock!

## Photo Papers

We carry a massive range of papers (sheets & rolls) at competitive prices. Below are some examples of the selection we stock.



**Photo Glossy 160gsm:**  
**6x4** 50 sheets **£50 FREE** **£3.99**  
**Photo Satin 200gsm:**  
**6x4** 100 sheets **£100 FREE** **£9.99**  
**A4** 20 sheets **£6.99**  
**Photo Glossy 200gsm:**  
**6x4** 100 sheets **£100 FREE** **£9.99**  
**A4** 20 sheets **£6.99**  
**Premium Pearl 270gsm:**  
**6x4** 50 sheets **£50 FREE** **£6.99**  
**A4** 50 sheets **£16.99**  
**Premium Gloss 270gsm:**  
**6x4** 50 sheets **OFFER** **£6.99**  
**A3** 25 sheets **OFFER** **£15.99**  
**A3+ 25 sheets OFFER** **£19.99**  
**Smooth Pearl 310gsm:**  
**6x4** 100 sheets **£17.99**  
**7x5** 100 sheets **£21.99**  
**A4** 100 sheets **£16.99**  
**A4** 250 sheets **£99.99**  
**A3** 25 sheets **£31.99**  
**A3+ 25 sheets** **£43.99**  
**17" Roll** 30 metres **£84.99**  
**24" Roll** 30 metres **£119.99**  
**Smooth Gloss 310gsm:**  
**6x4** 100 sheets **£17.99**  
**7x5** 100 sheets **£21.99**  
**A4** 25 sheets **£16.99**  
**A4** 100 sheets **£47.99**  
**A3** 25 sheets **£31.99**  
**A3+ 25 sheets** **£43.99**  
**Premium Matt Duo 200 gsm:**  
**A4** 50 sheets **£14.99**  
**Heavy Duo Matt 310gsm:**  
**A4** 50 sheets **£18.99**  
**A3+ 50 sheets** **£51.99**  
**Gold Fibre Silk 310gsm:**  
**A4** 50 sheets **£43.99**  
**A3+ 50 sheets** **£109.99**  
**Gold Mono Silk 270gsm:**  
**A4** 25 sheets **£18.99**  
**A3+ 25 sheets** **£49.99**

**Smooth Pearl 280gsm:**  
**6x4** 100 sheets **£12.99**  
**7x5** 100 sheets **£18.99**  
**A4** 50 sheets **£18.99**  
**A3** 50 sheets **£35.99**  
**A3+ 25 sheets** **£28.99**  
**17" Roll** 30 metres **£64.99**  
**24" Roll** 30 metres **£89.99**

**Ultra Pearl 295gsm:**  
**6x4** 100 sheets **£14.99**  
**7x5** 100 sheets **£20.99**  
**A4** 25 sheets **£12.99**  
**A3** 25 sheets **£22.99**  
**A3+ 25 sheets** **£30.99**  
**13" Roll** 10 metres **£21.99**  
**17" Roll** 30 metres **£68.99**  
**24" Roll** 30 metres **£92.99**

**Titanium Lustre 280gsm:**  
**A4** 25 sheets **£22.99**  
**A3** 25 sheets **£44.99**  
**A3+ 25 sheets** **£62.99**  
**Oyster 271gsm:**  
**6x4** 100 sheets **£12.99**  
**7x5** 100 sheets **£18.99**  
**A4** 50 sheets **£18.99**  
**A3** 25 sheets **£22.99**  
**A3+ 25 sheets** **£28.99**  
**13" Roll** 10 metres **£26.99**  
**17" Roll** 30 metres **£64.99**  
**24" Roll** 30 metres **£89.99**

**Gloss 271gsm:**  
**6x4** 100 sheets **£12.99**  
**7x5** 100 sheets **£18.99**  
**A4** 50 sheets **£18.99**  
**A3** 25 sheets **£22.99**  
**A3+ 25 sheets** **£28.99**  
**13" Roll** 10 metres **£26.99**  
**17" Roll** 30 metres **£64.99**  
**24" Roll** 30 metres **£89.99**

**Matt Plus 240gsm:**  
**6x4** 100 sheets **£10.99**  
**7x5** 100 sheets **£13.99**  
**A4** 50 sheets **£13.99**  
**A3** 25 sheets **£17.99**  
**A3+ 25 sheets** **£22.99**  
**13" Roll** 10 metres **£24.99**  
**17" Roll** 30 metres **£42.99**  
**24" Roll** 30 metres **£58.99**

**Matt Proofing 160gsm:**  
**A4** 150 sheets **£18.99**  
**A3** 75 sheets **£22.99**  
**17" Roll** 30 metres **£26.99**  
**24" Roll** 30 metres **£36.99**  
**Double Sided Matt 250gsm:**  
**A4** 100 sheets **£24.99**  
**A3** 50 sheets **£27.99**

**Fine Art / Fibre Base Papers:**  
**FB Gold Silk A4** 25 sh **£23.99**  
**FB Gold Silk A3** 25 sh **£47.99**  
**FB Distinction A4** 25 sh **£25.99**  
**FB Distinction A3** 25 sh **£48.99**  
**FB Royal A4** 25 sheets **£28.99**  
**FB Royal A3** 25 sheets **£56.99**  
**FB Gloss A4** 25 sheets **£26.99**  
**FB Gloss A3** 25 sheets **£51.99**  
**FB Matt A4** 25 sheets **£19.99**  
**FB Matt A3** 25 sheets **£38.99**  
**Artist A4** 25 sheets **£22.99**  
**Artist A3** 25 sheets **£39.99**  
**Museum A4** 25 sheets **£25.99**  
**Museum A3** 25 sheets **£48.99**  
**Parchment A4** 25 sheets **£22.99**  
**Parchment A3** 25 sheets **£39.99**  
**Omega A4** 25 sheets **£24.99**  
**Omega A3** 25 sheets **£46.99**  
**Portrait A4** 25 sheets **£53.99**  
**Portrait A3** 25 sheets **£26.99**  
**Portrait White A4** 25 sh **£49.99**  
**Portrait White A3** 25 sh **£49.99**

## Canon

**PP-201 Plus Glossy II 275gsm:**  
**6x4** 50 sheets **£9.99**  
**7x5** 20 sheets **£11.99**  
**A4** 20 sheets **£11.99**  
**A3** 20 sheets **£27.99**  
**A3+ 20 sheets** **£36.99**  
**PT-101 Pro Platinum 300gsm:**  
**6x4** 20 sheets **£8.99**  
**A4** 20 sheets **£17.99**  
**A3** 20 sheets **£40.99**  
**A3+ 10 sheets** **£26.99**  
**SG-201 Semi-Gloss 260gsm:**  
**6x4** 50 sheets **£10.99**  
**A4** 20 sheets **£11.99**  
**A3** 20 sheets **£27.99**  
**A3+ 20 sheets** **£44.99**  
**LU-101 Pro Lustre 260gsm:**  
**A4** 20 sheets **£15.99**  
**A3** 20 sheets **£33.99**  
**A3+ 20 sheets** **£51.99**

Many more in stock!



**Smooth Pearl 280gsm:**  
**6x4** 100 sheets **£12.99**  
**7x5** 100 sheets **£18.99**  
**A4** 50 sheets **£18.99**  
**A4** 50 sheets **£18.99**  
**A3** 50 sheets **£35.99**  
**A3+ 25 sheets** **£28.99**  
**17" Roll** 30 metres **£64.99**  
**24" Roll** 30 metres **£89.99**

**Ultra Pearl 295gsm:**  
**6x4** 100 sheets **£14.99**  
**7x5** 100 sheets **£20.99**<



# Lowering the cost of photography

Orders are shipped promptly by Royal Mail 1st class post, for which we charge just £1.99 per order. All prices include VAT, and a full VAT receipt is provided with every order. Payment accepted credit/debit card, cheque or postal order. Orders accepted securely online, [www.premier-ink.co.uk](http://www.premier-ink.co.uk), over the telephone 01926 339977, by post, or by visiting our shop: Premier Ink & Photographic, Longfield Road, Sydenham Ind Estate, Leamington Spa CV31 1XB.

01926 339977 [www.premier-ink.co.uk](http://www.premier-ink.co.uk)



# Premier

Ink & Photographic

## Memory

The full range of Sandisk and Lexar memory cards at very competitive prices.

### SDHC & SDXC

**Lexar Professional 633X (95MB/s)**

16GB	£8.99
32GB	£15.99
64GB	£27.99
128GB	£54.99



### 1000X (150MB/s)

16GB	£14.99
32GB	£22.99
64GB	£35.99
128GB	£63.99



### 2000X (300MB/s)

32GB	£51.99
64GB	£95.99



### Sandisk Blue 33X (5MB/s)

4GB	£3.49
8GB	£3.99
16GB	£5.99



### Sandisk Ultra 266X (40MB/s)

8GB	£4.99
16GB	£6.99
32GB	£12.99
64GB	£24.99



### Sandisk Extreme 400X (60MB/s)

16GB	£10.99
32GB	£17.99
64GB	£34.99



### Sandisk Extreme Pro 633X (95MB/s)

16GB	£17.99
32GB	£23.99
64GB	£42.99
128GB	£82.99



### 1866X (280MB/s)

16GB	£49.99
32GB	£79.99
64GB	£129.99



### Compact Flash

**Lexar Professional 800X (120MB/s)**

8GB	£19.99
16GB	£27.99
32GB	£36.99
64GB	£56.99



### 1066X (160MB/s)

16GB	£33.99
32GB	£56.99
64GB	£99.99
128GB	£192.99



### Sandisk Ultra 333X (50MB/s)

8GB	£11.99
16GB	£15.99
32GB	£24.99



### Sandisk Extreme 800X (120MB/s)

16GB	£26.99
32GB	£32.99
64GB	£47.99
128GB	£94.99



### Sandisk Extreme Pro 1066X (160MB/s)

16GB	£33.99
32GB	£47.99
64GB	£82.99
128GB	£149.99



### XQD Cards

**Lexar Professional 1333X (200MB/s)**

32GB	£69.99
64GB	£99.99



### MicroSDHC & SDXC

**Lexar Professional 633X (95MB/s)**

32GB	£21.99
64GB	£43.99



### Delkin Professional 375X (56MB/s)

32GB	£16.99
64GB	£32.99



### Sandisk Ultra 320X (48MB/s)

16GB	£6.99
32GB	£12.99
64GB	£24.99



### Readers & Cases

Lexar USB3 Card Reader	£22.99
Lexar HR1 WorkFlow Hub	£49.99
Delkin USB2 Card Reader	£9.99
Delkin USB3 Card Reader	£19.99
Delkin SD Card (x8) Case	£6.99
Delkin CF Card (x4) Case	£6.99

## Batteries

Replacement rechargeable Li-Ion batteries, manufactured by Hahnel or Blumax. All come with a two-year guarantee.

### NB-2L/LH for Canon

NB-4L for Canon	£9.99
NB-5L for Canon	£9.99
NB-6L for Canon	£9.99
NB-7L for Canon	£9.99

### NB-9L for Canon

NB-10L for Canon	£12.99
NB-11L for Canon	£12.99
BP-511 for Canon	£12.99
LP-E5 for Canon	£9.99

### LP-E6 for Canon

LP-E8 for Canon	£12.99
LP-E10 for Canon	£12.99
LP-E12 for Canon	£12.99
NP45 for Fuji	£9.99

### NP50 for Fuji

NP95 for Fuji	£9.99
NPW126 for Fuji	£12.99
NP400 for Fuji	£12.99
EN-EL3E for Nikon	£14.99

### EN-EL5 for Nikon

EN-EL9 for Nikon	£9.99
EN-EL10 for Nikon	£9.99
EN-EL11 for Nikon	£9.99
EN-EL12 for Nikon	£9.99

### EN-EL14 for Nikon

EN-EL15 for Nikon	£19.99
EN-EL19 for Nikon	£24.99
EN-EL20 for Nikon	£12.99
EN-EL21 for Nikon	£12.99

### Li10B/12B for Olympus

Li40B/42B for Olympus	£9.99
Li50B for Olympus	£9.99
BLM-1 for Olympus	£12.99
BLN-1 for Olympus	£24.99

### BLS-1 for Olympus

BLS-5 for Olympus	£15.99
CGR-S006 for Panasonic	£9.99
CGA-S007 for Panasonic	£9.99
DMW-BCG10 for Panasonic	£19.99

### DMW-BCM13 for Panasonic

DMW-BLB13 for Panasonic	£27.99
DMW-BLC12 for Panasonic	£23.99
DMW-BLD10 for Panasonic	£23.99
DMW-BLG10 for Panasonic	£22.99

### DMW-BMB9 for Panasonic

D-Li90 for Pentax	£12.99
D-Li109 for Pentax	£12.99
SLB-1137D for Samsung	£9.99
SLB-1674 for Samsung	£12.99

### BG-1 for Sony

BX-1 for Sony	£14.99
BY-1 for Sony	£12.99
NP-FM500H for Sony	£19.99
NP-FH50 for Sony	£19.99

### NP-FW50 for Sony

NP-FW50 for Sony	£24.99
------------------	--------

### Battery Grips

Professional battery grips, made by Hahnel.

SDMKII for Canon	£84.99
SDMKIII for Canon	£84.99
6D for Canon	£84.99

### 70D for Canon

70D for Canon	£84.99
650D/700D for Canon	£84.99
D600 for Nikon	£84.99

### D800/D810 for Nikon

D3300/D5300 for Nikon	£74.99
D7100 for Nikon	£84.99

### Battery Chargers

**Universal Chargers**

Unipal ORIGINAL	£19.99
Unipal PLUS	£24.99
Unipal EXTRA	£29.99

### AA & AAA Chargers

Hahnel TC Novo inc. 4xAA	£8.99
Energizer Pro inc. 4xAA	£14.99
Energizer 1 Hr inc. 4xAA	£22.99

### Other Batteries

**Pre-Charged Rechargeables**

AA GP Recyco 3+1 FREE	£5.24
AAA GP Recyco 3+1 FREE	£5.24
AA Energizer Extreme (4)	£8.99
AAA Energizer Extreme (4)	£6.99

### Standard Rechargeables

AA GP 2600mAh (4)	£9.99
AA Lloytron 1300mAh (4)	£3.99
AA Lloytron 2700mAh (4)	£6.99
AAA Lloytron 1100mAh (4)	£3.99

### Lithium Batteries

AA Energizer Ultimate (4)	£5.99
AAA Energizer Ultimate (4)	£5.99
CR123A Energizer (1)	£1.99
CR2 Energizer (1)	£1.99

### 2CR5 Energizer (1)

CRP2 Energizer (1)	£3.99
CRV3 Energizer (1)	£5.99
A544 Energizer Alkaline (1)	£1.99
A23 Energizer Alkaline (1)	£1.99
LR44 Energizer Alkaline (2)	£1.99
CR2025, CR2032 etc	£1.99

## Filters

One of the largest ranges of screw-in threaded filters in the UK, from Hoya, Kood and Marumi. We carry sizes from 24mm, up to 105mm, and offer Clear Protectors, UVs, Skylights, Circular Polarisers, ND4s, ND16s, ND32s, ND64s, ND500s, ND1000s, Variable NDs, Starbursts, Close Up Sets and more! Below are just a few examples...

### KOOD Slim Frame

UV Filters	
37mm	£4.99
40.5mm	£4.99

### 46mm

49mm	£4.99
52mm	£4.99
55mm	£5.99

### 58mm

62mm	£7.99
67mm	£8.99
72mm	£9.99

### 77mm

82mm	£11.99
86mm	£14.99
86mm	£19.99

### KOOD Slim Frame

Circular Polarisers	
37mm	£12.99
40.5mm	£12.99

46mm	£12.99
49mm	£12.99
52mm	£14.99

### 55mm

58mm	£15.99
62mm	£17.99
67mm	£19.99

### 72mm

77mm	£22.99
82mm	£26.99
86mm	£34.99

### KOOD

ND4 & ND8 Filters	
52mm	£26.99
58mm	£34.99

### P-Type: 84mm wide filters

Standard Holder	£5.99
Wide Angle Holder	£6.99
Filter Wallet for 8 filters	£9.99

### Adapter Rings 49-82mm

Circular Polariser	£27.99
ND2 Solid	£12.99
ND2 Soft Graduated	£13.99

### ND2 Hard Graduated

ND4 Solid	£13.99
ND4 Soft Graduated	£13.99
ND4 Hard Graduated	£14.99

### ND8 Solid

ND8 Soft Graduated	£15.99
ND8 Hard Graduated	£15.99
Light Blue Graduated	£12.99

### Dark Blue Graduated

Light Tobacco Graduated	£12.99
Dark Tobacco Graduated	£12.99
Light Sunset Graduated	£14.99

### Dark Sunset Graduated

Starbursts x4, x6, x8	£17.99
Red/Green/Yellow each	£14.99
Six-piece ND Filter Kit	£59.99

### A popular kit containing an ND2, ND2

Soft Grad, ND4, ND4 Soft Grad, Filter Holder, plus Adapter Ring of your choice (49-82mm).

### Screw-Fit Lens Hoods

37mm Rubber Hood	£3.99
40.5mm Rubber Hood	£3.99
43mm Metal Hood	£3.99

### 46mm Rubber Hood

46mm Metal Hood	£3.99
49mm Rubber Hood	£3.99
49mm Shaped Petal Hood	£6.99

### 52mm Rubber Hood

52mm Shaped Petal Hood	£6.99
55mm Rubber Hood	£3.99
55mm Shaped Petal Hood	£6.99

### 58mm Rubber Hood

58mm Shaped Petal Hood	£6.99
62mm Rubber Hood	£4.99
62mm Shaped Petal Hood	£7.99

### 67mm Rubber Hood

67mm Shaped Petal Hood	£7.99
72mm Rubber Hood	£5.99
72mm Shaped Petal Hood	£9.99

### 77mm Rubber Hood

77mm Shaped Petal Hood	£5.99
Lens Caps	
Lens Caps Centre-Pinch	£2.99

### Body & Rear Lens Caps

Body & Rear Lens Caps	£3.99
-----------------------	-------



## Straps & Accessories



The ingenious Peak Design Clutch, Slide, Leash, Cuff & Capture Clip System. Entire range in stock.

From £15.99



### BLACKRAPID

Sling Straps from £29.99



OP TECH USA



Neoprene Straps from £11.99

## Tripods & Monopods



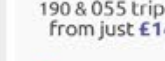
Manfrotto Carbon Fibre Monopod Only £59



Manfrotto XPRO 3 Way Head £99



NEW Manfrotto 190 & 055 tripods from just £149



Triad 30 Tripod with BH30 Ball Head Only £39



A big range of Billingham bags starting at £109





Hop online to browse our latest stock - unbeatable deals on cameras, lenses and accessories!



Buy, Sell or Part Exchange  
[www.mpbphotographic.co.uk](http://www.mpbphotographic.co.uk)  
0845 459 0101

# Sell Us Your Used Gear

with our famously **hassle-free** service

- ✓ Trade in for **cash** or an upgrade
- ✓ **Free collection** from anywhere in the EU
- ✓ **Free next working day delivery** on part exchange orders
- ✓ We buy most modern photographic equipment



**FREE**



## Get a Quote

Fill in our quick online form or give us a call and let us know what you're selling. We'll give you a competitive quote within one working day.



## We Arrange Collection

On a suitable day for you, at no extra cost.



## You Get Paid

Directly into your bank account. If you're part exchanging, we'll send your purchased items on free next working day delivery.

[www.mpbphotographic.co.uk](http://www.mpbphotographic.co.uk)  
0845 459 0101





# Amateur Photographer CLASSIFIED



## Heading

teddingtonphotographic  
New and used photographic specialist

BUY & SELL QUALITY  
USED PHOTOGRAPHIC  
EQUIPMENT

020 8977 1064

[www.teddingtonphotographic.com](http://www.teddingtonphotographic.com)

## Teaching Seminars

Make money from the lucrative wedding photography business!

You can't get the work without a great portfolio, but you can't build a portfolio without the work?

Problem solved! Wedding Photography Course to build or improve your portfolio.

Full day course in NW England.

Professional tuition from photographers with 40 years experience in weddings. Stunning locations, model brides and grooms.

All this for only £299 Next course Tuesday 11th October.

Small groups on each course, so a very limited number of places available.

Book now to avoid disappointment. Full course details and booking at

<http://vivaphotography.eventbrite.co.uk>

PLEASE MENTION

# Amateur Photographer

WHEN REPLYING TO ADVERTISEMENTS

## Accessories

## Wanted

**Peter Loy**  
COLLECTABLE CAMERA SPECIALISTS

**CAMERA COLLECTIONS WANTED**  
Telephone: +44 (0)20 8867 2751  
Call us - we can come to you (UK & Europe)  
[www.peterloy.com](http://www.peterloy.com)

## Accessories

## Photographic Backgrounds

Hard wearing • Low crease • Washable

**PLAIN**

8' x 8'	£15
8' x 12'	£24
8' x 16'	£29

PLUS P&P

10 COLOURS INC BLACK, WHITE & CHROMA COLOURS

**CLOUDED**

8' x 8'	£27
8' x 12'	£44

PLUS P&P

20 COLOURS. SPECIAL OFFER : 8 x 12 CLOUDED - 2 FOR £80 OR 3 FOR £115

01457 764140 for free colour brochure or visit  
[www.colourscape.co.uk](http://www.colourscape.co.uk)

## Cameras For Sale

### VINTAGE COLLECTABLE CAMERAS & LENSES

ASAHI PENTAX SP1000 + COSINA 28F2.8 + TAKUMAR 105 F2.8 £69  
BEAUMAT BEAUTY (RARITY) £89 CANON EXEE +1.8 £45 CANON FT + 1.8 £59 EXA 11A +2.8 £29 ENLARGING LENSES KOMURANON 50MMF3.5 (MINT) £35  
RODENSTOCK RODAGON 80MMF4 (MINT) £69 FED4+2.8 £29 MEDIUM FORMAT FILM MAGS-BRONICA ETR 220 £2 9 HASSELBLAD £59 RB67  
PROS 220 £29 LEICA BLACK 11 + ELMARIT 3.5 £424 LEICAFLEX BODY £169  
LEICA DIGILUX (working but no leads) £45 LUBITEL 166B £19  
MINOLTA 110 ZOOM £29 MIRAND FV 1.9 £49 OLYMPUS OM10 +1.8 £29  
AZ-1 ZOOM COMPACT (in original box) MINT £29 AZ300 SUPERZOOM  
Large Compact (digital info) £39 OM101 Power Focus SLR £55 PETRI V6  
SLR £59 PETRI RACER £33 WERRA (unique camera) orig. box £39

FOR MUCH MORE FULL LIST OF EVERYTHING email or ring

[irvingfreed@yahoo.co.uk](mailto:irvingfreed@yahoo.co.uk) Tel: 07773472992 02085544424

## Light Tents

Light Tents, Tabletop Studios & Fluorescent Lighting

80cm Tabletop Studio Kit £229.90  
200cm Portrait Studio Cube £299.00  
Acrylic Riser Tables (Black+White) £19.99  
7 Bulb Lighting + Octagon Softbox £279.00 pair

[www.stevesphotoshop.co.uk](http://www.stevesphotoshop.co.uk)

Fast Despatch  
01530 272229  
all prices plus p&p

## Accessories

Print your own cards for all Special Occasions with 50 x A5 or 25 x A4 Imajet Pre-Scored Satin-Matt 230g Cards with Envelopes...only £12.98

# onlinepaper.co.uk

The online paper specialists

Check site for Special Offers & Promotions  
FREE UK P&P till OCT 30th Checkout Code AP249

A huge range of papers in stock at great web prices

Like us on Facebook for more great offers

Award winning papers, next day delivery, as standard

Call 01892 771245

Email

[sales@onlinepaper.co.uk](mailto:sales@onlinepaper.co.uk)



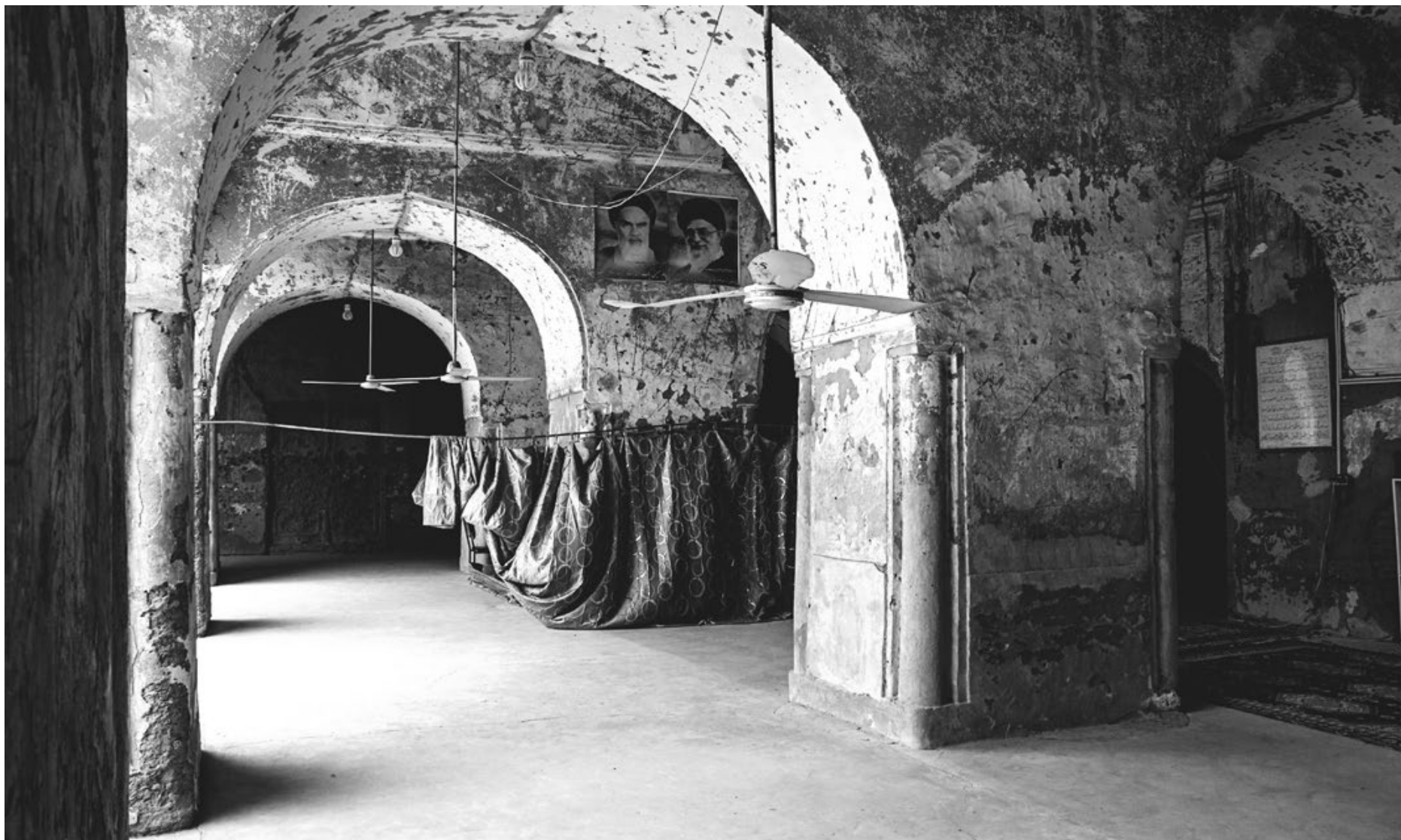




# Final Analysis

**Roger Hicks considers...**

'Masjid-i Jami, Fahraj, Iran', 2015, by Davide Palmisano



© DAVIDE PALMISANO

**T**he Masjid-i of Fahraj is the oldest mosque in Iran, built in about 58AH, or 632AD. The thick pillars are built of adobe, sun-dried brick, faced with plaster. Breathe in: you can almost smell the cool mustiness of the walls. A great photograph can engage more senses than just vision.

I saw this picture at Arles Photography Festival in 2016, as a part of what Palmisano calls *Work in Progress: Iran*. It pretty much stopped me in my tracks, partly for its technical exquisiteness, partly for its universality. Yes, it's a mosque, but it stands for countless ancient buildings, of any religion or none.

The more you look at it, the more you see. This is the Jami or Jame Mosque, the Friday Mosque, the name generally given to the main or central mosque in a town or city. It's still in use, almost 1,400 years

after it was built. There have been small changes. Rickety electric fans hang from the ceiling, energy-saving light bulbs are installed in the arches and photographs hang on the wall. But none of this affects the immediate impression of antiquity. The patched and flaking plaster and the simple, massive architecture are far more immediate. They are what we see first.

## **Calm and coolness**

To a very large extent, this is down to the unifying power of black & white. Google other pictures of the same mosque, and some of the details are colourful to the point of garish. Because monochrome can portray a far wider brightness range than colour, too, we can see into the shadows far better. This adds to the impression of calm and coolness: in conventional colour we would have glaring brightness

contrasted with stygian blackness, although it would be very interesting to see an HDR colour picture of the same subject. It also reminds us that overly bright whites, in the wrong places, can destroy a picture. There's enough texture in even the brightest parts of the arches that they're not blown. There's a place for contrast, and this isn't it.

Finally, look at the dull, dark-grey upright on the left. It provides a perfect counterweight to the darkness on the right. Without it, the picture would not so much leak out of its frame as lurch to the left. The texture is important, too. If it were flat and perfect, it would be an overly modern, jarring end-stop. As so often, a great picture is the result of a lot of details coming together – yet another illustration of the old saying that genius is an infinite capacity for taking pains.

AP

Roger Hicks has been writing about photography since 1981 and has published more than three dozen books on the subject, many in partnership with his wife Frances Schultz (visit his new website at [www.rogerandfrances.eu](http://www.rogerandfrances.eu)). Every week in this column Roger deconstructs a classic or contemporary photograph. **Next week he considers an image by Giada Connestari.**



# With up to £150 cashback on selected Canon lenses, it's the perfect time to add to your ultimate kit bag!

## Canon EF 100-400mm f/4.5-5.6L IS II USM

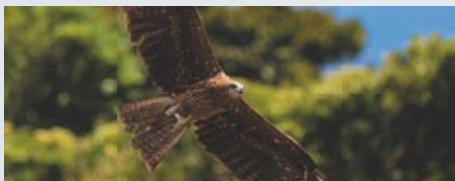
A compact, high-performance 100-400mm zoom lens that's ideal for those shooting sports, action and wildlife photography. A 4-stop Image Stabilizer and high-quality optics deliver superb sharpness.



**VERSATILE SUPER-TELEPHOTO PERFORMANCE**  
A great choice for sports and wildlife photography – the 100-400mm zoom range puts you right next to distant subjects, and lets you react quickly in a fast-changing situation.



**STAY SHARP, WHATEVER THE LIGHT**  
A three-mode Image Stabilizer guards against blur from camera shake, allowing handheld shooting with shutter speeds up to 4 stops slower than normal.



**FAST FOCUS WHEN YOU WANT IT**  
Enjoy fast USM autofocus that locks on accurately and in near-silence. Full-time manual focus override allows precise adjustment without taking your camera away from your eye.



**PROTECTED FROM THE GREAT OUTDOORS**  
This lens is sealed against dust and moisture, so you can keep shooting even when conditions turn bad. A fluorine coating on the lens' front element repels dirt making the lens easy to clean.



**£150**  
cashback

In stock at only  
**£1,649.00\***

\*Price includes £150 cashback! You pay £1,799.00 and claim £150 from Canon UK. Ends 18.10.2016.

Views of the Canon 100-400mm II from Andy Rouse (Park Cameras Ambassador)

"The new 100-400 is my go to lens for all of my professional aviation & wildlife photography. It's light, has a great range and has amazing sharpness across the whole range. With great performance for backlit shooting, it me gives me all the edge I need and I'd be lost without it."



Canon EF 28mm f/2.8 IS USM



**£75**  
cashback

**Our price £314.00\***

\*Price includes £75 cashback. You pay £389.00 and claim £75 back from Canon UK. Ends 18.10.2016

Canon EF 50mm f/1.4 USM



**£40**  
cashback

**Our price £239.00\***

\*Price includes £40 cashback. You pay £279.00 and claim £40 back from Canon UK. Ends 18.10.2016

Canon EF 85mm f/1.8 USM



**£40**  
cashback

**Our price £239.00\***

\*Price includes £40 cashback. You pay £279.00 and claim £40 back from Canon UK. Ends 18.10.2016

Canon EF-S 15-85mm f/3.5-5.6 IS USM



**£75**  
cashback

**Our price £464.00\***

\*Price includes £75 cashback. You pay £539.00 and claim £75 back from Canon UK. Ends 18.10.2016

Canon EF 24-105mm f/3.5-5.6 IS STM



**£75**  
cashback

**Our price £300.00\***

\*Price includes £75 cashback. You pay £375.00 and claim £40 back from Canon UK. Ends 18.10.2016

Canon EF 70-200mm f/2.8L IS II USM



**£150**  
cashback

**Our price £1,449.00\***

\*Price includes £150 cashback. You pay £1,599.00 and claim £150 back from Canon UK. Ends 18.10.2016

## EOS 5D Mark IV

LIMITED NUMBERS NOW IN STOCK!



Body only  
**£3,599.00**  
Lens sold separately.

Designed to perform in every situation, the EOS 5D Mark IV is beautifully engineered and a thoroughly accomplished all-rounder.

Purchase from Park Cameras and you'll go into a draw to **WIN ONE OF FOUR PRIZES** giving you the opportunity to capture some great shots from iconic locations! Learn more at [www.parkcameras.com/canon-5d-mark-iv](http://www.parkcameras.com/canon-5d-mark-iv)

Promotion period: 25<sup>th</sup> August - 31<sup>st</sup> October 2016.

# PARKCameras



VISIT OUR WEBSITE - UPDATED DAILY  
**[www.parkcameras.com/ap](http://www.parkcameras.com/ap)**

OR PHONE US 7 DAYS A WEEK  
**01444 23 70 60**

All prices include VAT @ 20%. See website for our opening times for both our London and Burgess Hill stores. All products are UK stock. E&OE. Please mention "Amateur Photographer" when ordering items from this advert. Prices correct at time of going to press; Prices subject to change; check website for latest prices.

Follow us for the latest news, offers & competitions







# EISA AWARDS 2016-17

Celebrating the year's best products

EISA is the unique association of over 45 special interest magazines in hi-fi, home theatre, in-car electronics, mobile electronics, photo and video, from 23 European countries. Every year the EISA jury of experts rewards the best products in each class with a coveted EISA Award – results that have consistently stood the test of time. So whenever you see an EISA Award logo you can be sure the winning product is the very best of the best.

